

D-0166

19200124

REFERENCE COPY

9200124

2-171

SAM 19200124

**THE IMPACT OF THE PERSIAN GULF WAR
AND THE DECLINE OF THE SOVIET
UNION ON HOW THE UNITED STATES
DOES ITS DEFENSE BUSINESS**

HEARINGS

BEFORE THE

**COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES**

ONE HUNDRED SECOND CONGRESS

FIRST SESSION

HEARINGS HELD

**FEBRUARY 27, MARCH 4, 8, 12, 19, APRIL 12, 16, 22, 25, 26, 30, MAY
1 AND JUNE 12, 1991**

20101015318

D-0166

19200124

REFERENCE COP

**DO NOT DESTROY
30 DAY LOAN
RETURN TO AFSAA/SAMI
1777 NORTH KENT STREET, 7TH FLOOR
ROSSLYN VA 22209 (703) 588-6940**



Legacy Number: 9200124 19200124



DEFENSE TECHNICAL INFORMATION CENTER

Information for the Defense Community

DTIC® has determined on 10/29/2010 that this Technical Document has the Distribution Statement checked below. The current distribution for this document can be found in the DTIC® Technical Report Database.

- ☒ **DISTRIBUTION STATEMENT A.** Approved for public release; distribution is unlimited.
- ☐ **© COPYRIGHTED;** U.S. Government or Federal Rights License. All other rights and uses except those permitted by copyright law are reserved by the copyright owner.
- ☐ **DISTRIBUTION STATEMENT B.** Distribution authorized to U.S. Government agencies only (fill in reason) (date of determination). Other requests for this document shall be referred to (insert controlling DoD office)
- ☐ **DISTRIBUTION STATEMENT C.** Distribution authorized to U.S. Government Agencies and their contractors (fill in reason) (date of determination). Other requests for this document shall be referred to (insert controlling DoD office)
- ☐ **DISTRIBUTION STATEMENT D.** Distribution authorized to the Department of Defense and U.S. DoD contractors only (fill in reason) (date of determination). Other requests shall be referred to (insert controlling DoD office).
- ☐ **DISTRIBUTION STATEMENT E.** Distribution authorized to DoD Components only (fill in reason) (date of determination). Other requests shall be referred to (insert controlling DoD office).
- ☐ **DISTRIBUTION STATEMENT F.** Further dissemination only as directed by (inserting controlling DoD office) (date of determination) or higher DoD authority.
- Distribution Statement F is also used when a document does not contain a distribution statement and no distribution statement can be determined.*
- ☐ **DISTRIBUTION STATEMENT X.** Distribution authorized to U.S. Government Agencies and private individuals or enterprises eligible to obtain export-controlled technical data in accordance with DoDD 5230.25; (date of determination). DoD Controlling Office is (insert controlling DoD office).

**THE IMPACT OF THE PERSIAN GULF WAR
AND THE DECLINE OF THE SOVIET
UNION ON HOW THE UNITED STATES
DOES ITS DEFENSE BUSINESS**

HEARINGS

BEFORE THE

**COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES**

ONE HUNDRED SECOND CONGRESS

FIRST SESSION

HEARINGS HELD

**FEBRUARY 27, MARCH 4, 8, 12, 19, APRIL 12, 16, 22, 25, 26, 30, MAY
1 AND JUNE 12, 1991**



DO NOT DESTROY
30 DAY LOAN
RETURN TO AF/SAMI
PENTAGON, ROOM 1 D - 362

U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1991

43-413

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402

ISBN 0-16-037105-8

HOUSE COMMITTEE ON ARMED SERVICES

ONE HUNDRED SECOND CONGRESS

LES ASPIN, Wisconsin, *Chairman*

CHARLES E. BENNETT, Florida
G.V. (SONNY) MONTGOMERY, Mississippi
RONALD V. DELLUMS, California
PATRICIA SCHROEDER, Colorado
BEVERLY B. BYRON, Maryland
NICHOLAS MAVROULES, Massachusetts
EARL HUTTO, Florida
IKE SKELTON, Missouri
DAVE McCURDY, Oklahoma
THOMAS M. FOGLIETTA, Pennsylvania
DENNIS M. HERTEL, Michigan
MARILYN LLOYD, Tennessee
NORMAN SISISKY, Virginia
RICHARD RAY, Georgia
JOHN M. SPRATT, Jr., South Carolina
FRANK McCLOSKEY, Indiana
SOLOMON P. ORTIZ, Texas
GEORGE (BUDDY) DARDEN, Georgia
ALBERT G. BUSTAMANTE, Texas
BARBARA BOXER, California
GEORGE J. HOCHBRUECKNER, New York
OWEN B. PICKETT, Virginia
H. MARTIN LANCASTER, North Carolina
LANE EVANS, Illinois
JAMES H. BILBRAY, Nevada
JOHN TANNER, Tennessee
MICHAEL R. McNULTY, New York
GLEN BROWDER, Alabama
GENE TAYLOR, Mississippi
NEIL ABERCROMBIE, Hawaii
THOMAS H. ANDREWS, Maine
CHET EDWARDS, Texas

WILLIAM L. DICKINSON, Alabama
FLOYD SPENCE, South Carolina
BOB STUMP, Arizona
LARRY J. HOPKINS, Kentucky
ROBERT W. DAVIS, Michigan
DUNCAN HUNTER, California
DAVID O'B. MARTIN, New York
JOHN R. KASICH, Ohio
HERBERT H. BATEMAN, Virginia
BEN BLAZ, Guam
ANDY IRELAND, Florida
JAMES V. HANSEN, Utah
CURT WELDON, Pennsylvania
JON KYL, Arizona
ARTHUR RAVENEL, Jr., South Carolina
ROBERT K. DORNAN, California
JOEL HEFLEY, Colorado
JIM McCRERY, Louisiana
RONALD K. MACHTLEY, Rhode Island
JIM SXTON, New Jersey
RANDY "DUKE" CUNNINGHAM, California
GARY A. FRANKS, Connecticut

RUDY F. DE LEON, *Staff Director*

CONTENTS

CHRONOLOGICAL LIST OF HEARINGS

1991

	Page
Wednesday, February 27 (DOD Desert Storm Supplemental).....	1
Monday, March 4 (Fairness of All-Volunteer Force).....	53
Friday, March 8 (National Guard Roundout Brigades).....	157
Tuesday, March 12 (Twenty-five Percent Build-down—Base Force Concept)	237
Tuesday, March 19 (Twenty-five Percent Build-down—CBO Assessment)	321
Friday, April 12 (Goldwater-Nichols DOD Reorganization Act of 1986 and the Gulf War).....	385
Tuesday, April 16 (Implications for the Strategic Defense Initiative of Patriot Missile's Success in Operation Desert Storm).....	417
Monday, April 22 (Performance of High-Technology Equipment in Operation Desert Storm).....	533
Thursday, April 25 (Goldwater-Nichols DOD Reorganization Act of 1986 and the Gulf War).....	591
Friday, April 26 (Whether Operation Desert Storm was so Unique an Event that Dangers Could be Faced in Drawing Narrow Lessons from the Conflict)	619
Tuesday, April 30 (Military Reform Agenda in Light of Operation Desert Storm).....	663
Wednesday, May 1 (Sustainability and Recruiting of All-Volunteer Force)	717
Wednesday, June 12 (Operation Desert Shield/Desert Storm)	915

STATEMENTS PRESENTED BY MEMBERS OF CONGRESS

Aspin, Hon. Les, a Representative from Wisconsin, Chairman, House Armed Services Committee	1, 53, 157, 237, 321, 385, 417, 533, 591, 619, 663, 717, 915
Bateman, Hon. Herbert H., a Representative from Virginia, Ranking Minority Member, Military Personnel and Compensation Subcommittee.....	720
Byron, Hon. Beverly B., a Representative from Maryland, Chairman, Military Personnel and Compensation Subcommittee	54, 719
Dickinson, Hon. William L., a Representative from Alabama, Ranking Minority Member, House Armed Services Committee:	
Statement	2, 158, 238, 321, 418, 592, 664, 718, 916
Prepared statement	665

PRINCIPAL WITNESSES WHO APPEARED IN PERSON OR SUBMITTED WRITTEN STATEMENTS

Bandow, Douglas Leighton, Fellow, CATO Institute:	
Statement.....	88
Prepared statement	92
Basch, M. Sgt. Richard D., United States Marine Corps.....	892
Boyd, Col. John, USAF, Ret., Former Chief, Development Plans and Analysis, Department of the Air Force	665
Brown, Brig. Gen. Gary E., Director, Personnel Procurement, U.S. Marine Corps:	
Statement	385, 830
Prepared statement	832
Brown, Harold, Former Secretary of Defense.....	385
Burba, Gen. Edwin H., Jr., Commander in Chief, Forces Command:	
Statement.....	159
Prepared statement	163

	Page
Carnesale, Albert, Professor of Public Policy and Administration, John F. Kennedy School of Government, Harvard University:	
Statement.....	476
Prepared statement	480
Caston, S. Sgt. Keith, United States Army.....	899
Ceja, S. Sgt. Manual, Jr., United States Air Force.....	895
Coker, Col. Fletcher C., Jr., Commander, 155th Armored Brigade, Mississippi Army National Guard.....	191
Conaway, Lt. Gen. John B., Chief, National Guard Bureau:	
Statement.....	178
Prepared statement	182
Davis, Col. James D., Commander, 48th Infantry Brigade, Georgia.....	190
Dorn, Edwin, Senior Staff Member, Center for Public Policy Education, The Brookings Institution:	
Statement.....	112
Prepared statement	114
Duncan, Hon. Stephen, Assistant Secretary of Defense for Reserve Affairs:	
Statement.....	773
Prepared statement	775
Hale, Robert F., Assistant Director for National Security, Congressional Budget Office:	
Statement	54, 328
Prepared statement	59, 335
Hart, Gary, Former Senator from Colorado, and Former Member of the Senate Armed Services Committee.....	669
Hicks, Donald, Former Under Secretary of Defense for Research and Engineering:	
Statement.....	677
Prepared statement	682
Hill, Sfc. Anthony, United States Army Reserve	893
Jehn, Hon. Christopher, Assistant Secretary of Defense for Force Management and Personnel:	
Statement.....	740
Prepared statement	742
Jeremiah, Adm. David E., Vice Chairman of the Joint Chiefs of Staff:	
Statement.....	262
Prepared statement	276
Jones, Gen. David, USAF (Ret.), Former Chairman of the Joint Chiefs of Staff	391
Jugenheimer, Donald, Acting Dean and Professor of Communications, College of Liberal Arts, Fairleigh Dickinson University.....	875
Kelly, Lt. Gen. Thomas W., (U.S.A., Retired), Former Director of Operations, Joint Chiefs of Staff.....	592
Krings, Hon. John E., Director, Office of Operational Testing and Evaluation, Department of Defense:	
Statement.....	534
Prepared statement	538
Lehman, John, Former Secretary of the Navy	673
Libby, Hon. I. Lewis, Principal Deputy Under Secretary of Defense (Strategy and Resources):	
Statement.....	239
Prepared statement	244
Martin, Albert J., Advertising Consultant:	
Statement.....	878
Prepared statement	882
McKinney, Rear Adm. Henry C., Commander, Navy Recruiting Command:	
Statement.....	855
Prepared statement	858
O'Keefe, Sean, Comptroller of the Department of Defense:	
Statement.....	3
Prepared statement	12
Perle, Hon. Richard, Resident Fellow, American Enterprise Institute:	
Statement.....	418
Prepared statement	422
Perry, Bill, Chairman of Technologies, Strategies and Alliances and Former Under Secretary of Defense for Research and Engineering.....	559
Postol, Professor Theodore A., Center for International Study, Massachusetts Institute of Technology:	
Statement.....	425

	Page
Postol, Professor Theodore A., Center for International Study, Massachusetts Institute of Technology—Continued	
Prepared statement	429
Rowen, Asd: Prepared statement	21
Salvadore, Brig. Gen. John J., Commander, Air Force Recruiting Service:	
Statement	846
Prepared statement	848
Schwarzkopf, Gen. H. Norman, Commander in Chief, United States Central Command:	
Statement	917
Prepared statement	920
Snyder, Electrician's Mate 1st Class Michael	897
Sprey, Pierre, Former Special Assistant to the Assistant Secretary of Defense for Systems Analysis:	
Statement	543
Prepared statement	552
Thurman, Gen. Maxwell R., U.S. Army (Retired):	
Statement	721
Prepared statement	728
Train, Adm. Harry, USN (Ret.), Former Commander in Chief, U.S. Atlantic Command	394
Vogt, Gen. John W., USAF (Ret.), Former Commander in Chief, U.S. Air Forces in Europe	635
Walters, Ronald, Professor of Political Science, Howard University:	
Statement	124
Prepared statement	128
Westmoreland, Gen. William C., USA (Ret.), Former Chief of Staff of the Army	620
Wheeler, Maj. Gen. Jack C., Commander, U.S. Army Recruiting Command:	
Statement	815
Prepared statement	819
Whipple, Brig. Gen. Gary J., Commander 256th Infantry Brigade, Louisiana	186
Zumwalt, Adm. Elmo, (Ret.), Former Chief of Naval Operations	630

DOD DESERT STORM SUPPLEMENTAL

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, Wednesday, February 27, 1991.

The committee met, pursuant to notice, at 1:42 p.m., in room 2118, Rayburn House Office Building, Hon. Les Aspin (chairman of the committee) presiding.

OPENING STATEMENT OF HON. LES ASPIN, A REPRESENTATIVE FROM WISCONSIN, CHAIRMAN, HOUSE ARMED SERVICES COM- MITTEE

The CHAIRMAN. The meeting will come to order. The committee today welcomes as witnesses Mr. Sean O'Keefe, the Comptroller of the Department of Defense, and Mr. Henry Rowen. It does not say that here, but that is who is sitting at the witness table.

It says here, it says Mr. I. Lewis Libby, but I looked down and I see Henry Rowen.

OK. Anyway, Sean O'Keefe and Henry Rowen are here. They will testify on the President's supplemental request for the Persian Gulf War.

Last year's budget agreement specified that the cost of the Desert Shield deployment would not be included in the regular budget process. Instead, it was to be handled separately. That request is what we have before us here today.

The committee would like to raise two very broad questions, and I hope the gentlemen at the witness table will be able to help us.

The first is creating the Desert Shield Working Capital Fund. Is that the right solution?

It would operate basically like a checking account for the Pentagon. This is an unprecedented approach to financing a large-scale military operation, and we would like to inquire into exactly how this would work and why we should approve it.

The second question to raise is the size of the account. Is that the right amount?

The request asks Congress for \$15 billion in new budget authority and access to our allies' cash contributions to continue prosecuting the war. We would like to explore with you how you came up with this figure.

We support our troops in the Middle East. We want to make sure they have what they need to finish the war, and we also want to create a process that will enable us to give full accounting to the American taxpayer.

Before I recognize Mr. O'Keefe, let me recognize Bill Dickinson for what comments he would like to make.

STATEMENT OF HON. WILLIAM L. DICKINSON, A REPRESENTATIVE FROM ALABAMA, RANKING MINORITY MEMBER, HOUSE ARMED SERVICES COMMITTEE

Mr. DICKINSON. Thank you, Mr. Chairman.

Prefacing my remarks, let me say, before coming in here, General Schwartzkopf was giving his daily briefing on television, and I would say this has got to be one of the most extraordinary things in the annals of military history. We have captured some 27 divisions, over 50,000 prisoners of war, and the story goes on and on.

This morning's television showed an Italian news camera man taking prisoners of war. They were coming up and kissing his hand and then surrendering to him, and, hell, all he wanted to do was take pictures.

But anyway, we have had phenomenal success, which sort of brings us to the point where we are now, and it is a pleasure to welcome both of you, Mr. Rowen and Sean, here. As I understand, Sean, this is the first time you have had the guts to come back across the river since you left.

[Laughter.]

But we are happy to have this opportunity at you. I know you must be a weary warrior by now.

Under the best of circumstances, developing and executing budgets of hundreds of millions of dollars, billions of dollars, is a difficult task, and I am sure we all will agree that your tenure has seen anything but the best of circumstances.

Nevertheless, you have hung in there and done an admirable job, and we appreciate it.

Although we have all anxiously been awaiting the unveiling of the Department's supplemental budget request, I am sure that we would just as soon be in the situation of having not to deal with it.

However, I think it needs to be said from the outset that while there were some Members of the committee that did not favor the war option over continued diplomacy, just a few, all of us support the soldiers, sailors, marines, and airmen who have put their lives on the line for their country, who are doing so in an exemplary way and are doing so even as we speak.

But support for the troops, even in war time, does not translate into abdication of our responsibility to perform the resource management oversight role that we were elected to do. You will have to make your case before some of us to convince us that we are not being asked to cut the Department of Defense just a blank check for \$15 billion or maybe more.

So again, we welcome you both this afternoon and look forward to your explanations as to what this supplemental request is all about and how it is to work as to contributions from third countries, as well as our own year's tax treasury.

So, thank you, Mr. Chairman, and let me yield back.

The CHAIRMAN. Sean O'Keefe, the floor is yours, sir.

STATEMENT OF SEAN O'KEEFE, COMPTROLLER OF THE DEPARTMENT OF DEFENSE; ACCOMPANIED BY: HENRY S. ROWEN, ASSISTANT SECRETARY OF DEFENSE FOR INTERNATIONAL SECURITY AFFAIRS

Mr. O'KEEFE. Thank you, Mr. Chairman.

At the risk of correcting the record on the gentleman from Alabama, it has been my distinct pleasure to appear before this committee before, thank you.

Mr. DICKINSON. I wanted you to make an impression.

[Laughter.]

Mr. O'KEEFE. Obviously I have made a very strange impression on my previous appearances.

If you would, Mr. Chairman, I have a statement I would like to insert for the record—

The CHAIRMAN. Without objection.

Mr. O'KEEFE. Quickly summarize that statement with a few charts to go through.

Again, thank you very much for the opportunity to discuss the administration's Desert Shield/Desert Storm supplemental estimates and the appropriations proposal we have advanced.

The President has repeatedly emphasized that our efforts in the Persian Gulf are part of an international effort, that the struggle is not Iraq against the United States, but Iraq against the world.

Its most dramatic manifestation is the combined offensive being fought, even as we speak, with the Saudis, Kuwaitis, the Egyptians, the Europeans and other coalition forces fighting alongside U.S. service men and women. These coalition forces, we have learned from the news in the last few days, are doing a magnificent job militarily, as they seek to enforce the United Nations resolutions and unconditionally eject Iraq's forces from Kuwait.

While we cannot predict with certainty the precise course, we are heartened by the success thus far.

Over the past several weeks, Secretary Cheney and Deputy Secretary Atwood have testified that the administration believes that the traditional Cold War threat, a massive short-warning Warsaw Pact conventional attack into Western Europe, is very unlikely.

This war against Iraq presages very much the type of conflict we are more likely to confront in this new security era, major regional contingencies against foes well armed with advanced conventional and unconventional weaponry.

Thus the involvement of our allies in this conflict may have even greater implications for how we and they would respond to future regional conflicts.

The type of support provided by the members of the coalition has been political, economic, and military. The first and most fundamental demonstration of this responsibility-sharing has been the 12 United Nations resolutions that formed the core of the coalition mandate in this action against Iraq.

Thirty-five countries have personnel in the theater, with our allies committing nearly 300,000 troops, over 750 combat aircraft and 1,200 tanks to the multi-national coalition facing Iraq in the sands of the Arabian peninsula.

This responsibility-sharing can also be seen in the presence of over 60 warships from many nations in the naval blockade since the invasion.

The same spirit of shared responsibility can be seen in the packages of financial assistance for the front-line states, which Secretary Rowen can speak to in a little more depth than I can.

We meet this afternoon to review our great success in another aspect of responsibility-sharing. While we began the operation in August, prepared to shoulder the leadership burden without financial commitments in advance, our allies have since provided almost 90 percent of the financing to defray the incremental cost of Operation Desert Shield. They have also pledged substantial sums for the Desert Storm phase of the operation which began January 16th.

This degree of support from our allies is unprecedented, and it underscores the shared vision and the commitment of the coalition to our common goals in the Gulf.

We are seeking \$15 billion from the Congress today in new budget authority, while our allies have committed \$53.5 billion to the Desert Shield/Storm effort. This readiness on the part of our allies to bear a large portion of the financial burden of the operations bodes well for our efforts to militarily resolve the conflict and to build an enduring peace in the region thereafter.

Now a few comments on the development of the supplemental package, and then I will walk through a couple of charts.

We have segregated the presentation of the supplemental in two parts. The first is the cost estimates of the effort, presented on an annualized and quarterly basis and the notional cost of combat. So the cost estimates are specifically identified, severable from the second part, which is the financing methodology to retire the expected cost we see.

Truth being the best defense, the cost estimating is based on the quantifiable expenses to maintain a force of over 500,000 personnel in theater and admitting that we really do not know the cost of combat. The combat variables are heavily dependent on duration and intensity, factors which are beginning to clear, but are still largely unknown in light of the favorable trends.

The financing side of the equation is simpler. We propose to use the foreign contributions which have been accruing in the Defense Cooperation Account and the expected future receipts to retire the expenses we have been incurring with U.S. taxpayer dollars as we await action on this proposal.

Second, we propose the establishment of a working capital fund, as the Chairman mentioned, with an appropriation of \$15 billion, to act as a bridge as the contributions arrive.

Our intention would be to exhaust the foreign contributions as the primary source of financing and only using the working capital fund for interim financing or to cover the cost in excess of the contributions.

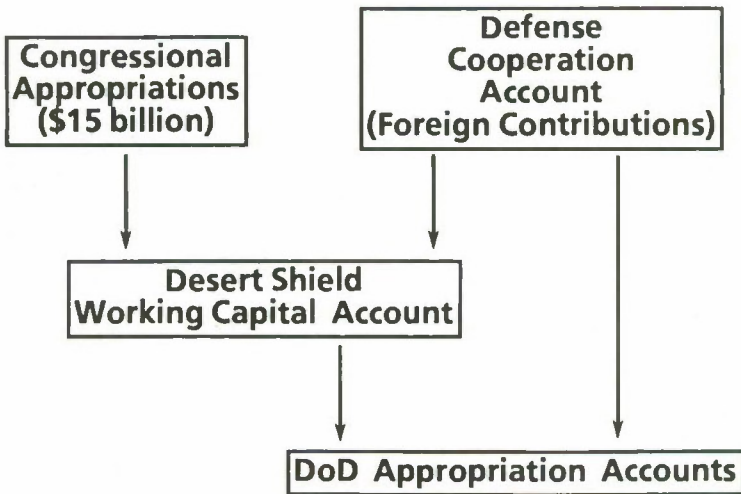
It is important to remember that Congress created the Defense Cooperation Account and released \$1 billion last October. This action and the in-kind assistance we have received has defrayed a portion of the cost thus far. The balance has been met by advanc-

ing defense appropriations operation funds otherwise intended for the third and fourth quarters of this fiscal year.

It is therefore imperative that Congress act expeditiously on this proposal for the Department to meet the expenses and as a visible expression to our allies that the contributions they made will be used as intended, and the U.S. is sharing in this financial partnership.

Now let me turn to just a couple of charts to go through the cost, the financing, and the methodology.

FY 1991 Desert Shield/ Desert Storm Supplemental Funding



First, to the methodology itself, in the green box is the Defense Cooperation Account for the foreign contributions. This was the account created by Congress on the 1st of October last year as part of the continuing resolution.

The yellow box represents the \$15 billion of direct appropriations to be made to the Desert Shield Working Capital Account, the new account we are proposing as part of this package.

The intent, again, would be to use the Defense Cooperation Account, the foreign monies, to retire the costs involved in this particular activity directly to the Defense Appropriation Account, exactly the way in which it was formulated when the Congress enacted this particular structure as part of the October Act.

The Desert Shield Working Capital Fund would only be used to the extent that we have a lag in the contributions received, where costs are running in excess of that, or to the extent that the contributions are inadequate to cover the total cost whenever this may end.

Our intention would be to keep the Working Capital Fund at a standing balance of \$15 billion as often as we can, given the fact that there are any monies in the Foreign Contribution Account, it would immediately be made available to the extent that we draw anything from the Working Capital Fund.

So it is a line of credit that ultimately will assure that we meet the costs involved in this effort.

In the end, the hope would be that the Defense Cooperation Account and the assets accrued therein would be sufficient, and this provides the opportunity for that to be a prospect. To the extent that it is not, the Working Capital Fund would then be utilized.

DESERT SHIELD
CY 1990 Major Foreign Contributions ^{1/}
(U.S. \$ Million)

<u>Contributor</u>	<u>Commitments</u>	<u>Receipts</u>		
		<u>Cash</u>	<u>In-Kind</u>	<u>Total</u>
Saudi Arabia	3,339	807	854	1,661
Kuwait	2,506	2,500	6	2,506
UAE	1,000	870	111	981
Japan ^{2/}	1,740	866	457	1,323
Germany	1,072	272	531	803
Korea ^{3/}	80	50	21	71
Others	3	-	3	3
Total	9,740	5,365	1,983	7,348

^{1/} Data as of February 22, 1991; in-kind receipts are as of January 31, 1991.

^{2/} Japan pledged \$260 million to other coalition forces, for a total commitment of \$2 billion.

^{3/} Korea pledged \$15 million to other coalition forces, for a total commitment of \$95 million.

To the commitments themselves, they are broken into two sections. If you recall, last September and October, Deputy Secretary Atwood, Deputy Secretary Robson, and Deputy Secretary Eagleburger traveled about the Gulf and to Tokyo and Bonn, with the intent of exacting specific commitments and requests for assistance from our allies. This was the result of the first set of commitments made back then. It totalled, in that period and with a few adjustments made thereafter, to a total of \$9.7 billion in the last calendar year.

Most of that showed up in cash. There is a residual amount still remaining to be paid that is prominently accounted for by the need for a \$1.1 billion bill that will be advanced, or has been—I'm not quite certain what the status of it is—to Saudi Arabia for en route transportation costs, which they had agreed to pay, as well as the pipeline amounts that have come in from the German and Japa-

nese contributors for in-kind assistance. Those two amounts, we should see a clearing of within the next 30 days.

DESERT SHIELD
CY 1991 Major Foreign Contributions ^{1/}
(U.S. \$ Million)

<u>Contributor</u>	<u>Commitments</u>	<u>Receipts</u>		
		<u>Cash</u>	<u>In-Kind</u>	<u>Total</u>
Saudi Arabia	13,500	3,650	712	4,362
Kuwait	13,500	1,000	4	1,004
UAE	2,000 ^{2/}	-	29	29
Japan	9,000 ^{3/}	-	-	-
Germany	5,500	2,160	-	2,160
Korea	305	-	-	-
Others	-	-	-	-
Total	43,805	6,810	745	7,555

^{1/} Data as of February 22, 1991; in-kind receipts are as of January 31, 1991.; commitments are through March 31.

^{2/} An additional amount above the \$2 billion is under discussion.

^{3/} Under consideration by Diet.

For the second wave of contributions which were committed to in late January of this year, just a month ago, there was a total of \$43.8 billion pledged. We have already received \$6.8 billion of that just in the last 10 days in the form principally of cash contributions as you see, from the Saudis, the Kuwaitis, and the Germans.

The in-kind assistance report, which was prepared by the Central Command for the month of January, represents that \$745 million that has been captured through January 31.

The combination of this commitment of \$43.8 billion and the \$9.7 billion is what accounts for the \$53.5 billion that has been committed in total by the foreign contributors.

In aggregate, the amounts received so far, between those 2 calendar years, has been \$14.9 billion. Of that, \$11.2 billion of it is in cash sitting in the Defense Cooperation Account now, drawing interest, \$1 billion of the Cooperation Account having been previously released in December. So actually \$12 billion or a little more was actually received over this span of time.

To the cost estimate itself, again it has been very, very difficult to estimate what the cost estimate of the combat side of this would be, so what we have prepared here and what is underlying the supplemental appropriations proposal is to quantify the baseline incremental costs involved in maintaining a force of this size in theater.

**FY 1991 DESERT SHIELD INCREMENTAL COST ESTIMATE
SUMMARY**
(\$ Billions)

	<u>Oct-Dec 90</u>	<u>Jan-Mar 91</u>	<u>FY 1991</u>
Military Personnel	1.1	2.7	10.7
Operation & Maintenance	6.8	8.0	23.1
Military Construction	0.1	0.1	0.6
Investment	0.4	0.5	1.3
Revolving Funds	-	0.3	0.8
Fuel Price Increase	0.7	0.7	2.8
TOTAL	9.1	12.3	39.2

The combat expenses are above and beyond this, because it is very much dependent upon intensity of the battle on a given day, as well as weather conditions and a variety of other factors that may play into it.

Between October and December of 1990, we incurred \$9.1 billion of cost, prominently in the operations and maintenance areas. That is largely accounted for by the transportation expenses, but you have to look at this in the context of the events that occurred in that period of time.

From August through November, we were trying to deploy and maintain a force of approximately 200,000 to 225,000 folks. Subsequently, the President made the decision to accelerate that deployment and increase the number of folks in theater to over 500,000. The prominent deployment of those folks concluded around the end of January, and that is why the January through March costs are appreciably higher. It is not only the transportation expenses, but the number of people involved was much higher.

If you annualize this cost for the entire year, and say what would the notional expenses be based on the first quarter actuals, the second quarter estimates that we think are firming up at this point, and then a projection to maintain that force, the overall cost to maintain this size of a force in theater is incremental to the expenses we would have otherwise incurred to have kept the forces in the locations where they were before this started, would have been \$39.2 billion.

Again, the primary expenses have been operations and maintenance; 60 percent of it is operations and maintenance related. Again, that is the cost to transport as well as to support the individuals in place.

Military personnel, most of that is the cost to activate the reserve component. Once the activation occurs, they are paid from the active military appropriation accounts of the Department of Defense, as opposed to within the reserve personnel appropriation categories.

The CHAIRMAN. Sean, before we leave that chart, what are you assuming about the timing here? Tell me, that fiscal year 1991 figure of \$39.2 billion assumes what in terms of—how long do these expenditures continue? MR. O'Keefe. All year.

The CHAIRMAN. All year?

Mr. O'KEEFE. That is a notional idea. Just to give you a context of how this would play out for the whole year, if you were to maintain a force of this size, it captures the first quarter actuals, so in that \$39.2 billion, \$1.9 billion of it is the actuals we incurred.

The CHAIRMAN. That we know is an actual?

Mr. O'KEEFE. Yes, sir. It is as close as you can get, because the first order of priority for the folks in the field are going to do their bit, as opposed to filling out paperwork, but that is what the accounting records seemed to demonstrate is \$9.1 billion.

The CHAIRMAN. OK. Then the second number, that is an estimate, because it goes to the end of March, right?

Mr. O'KEEFE. Correct. That is right, sir. It includes the additional cost to get the additional 200,000 troops deployed as well as the expense to activate the higher number of reservists that occurred late in the fall or early winter, and the \$39.2 billion is an annualized cost, assuming those two periods, and then from there on, so the balance would be \$18 billion roughly, is what it would take for the balance of the year to maintain a force of this size, steady-state, exactly no change. So it is not an intention to keep them through September 30. It is more of an illustrative example of how the costs have been derived and what they would represent for a full year, if you were to take it that far.

The CHAIRMAN. Thank you.

Mr. O'KEEFE. Last, given the concept proposed to utilize the foreign contributions, first and foremost, and the working capital fund only to the extent necessary to cover additional expenses above the amount of the contributions should they occur. If this carries on further than what we are now seeing as a possibility as well as to the extent there is any lag time in the receipt of contributions which we do not expect, but could occur.

HOW FY 1991 DESERT SHIELD FUNDS WILL BE SPENT (\$ Billions)

- Desert Shield:
 - October - December 1990 9.1
 - January - March 1991 12.3
- Post Combat Phasedown Costs 7.0
- Return of Personnel and Equipment 5.2
- Production Surge/Accelerated Acquisition
- Replace Selective Assets

The prioritization of how that would happen in terms of how we would spend the funds in aggregate from both accounts would be to retire the \$9.1 billion cost that we have incurred thus far. One billion of that has already been received from the Defense Cooperation Account as I mentioned in October, as well as a defrayal of about \$2.7 billion has been received as in-kind or host nation support assistance.

The balance of it has been costs that we have been incurring directly. The January to March estimate of \$12.3 billion which we just went over, the post combat phase down cost would be a representation of a more orderly kind of withdrawal from the region as opposed to the break neck speed to which we deployed everyone to the theater in the early period as well as again in November and December.

The \$7 billion would sustain the troops in place as there with a withdrawal coming out. It makes no presumption about how long that would take or how long we intend to stay in theater. It is more of an estimate of what it would cost as you are beginning to withdraw people from the area based on lift, limitations of airlift as well as sealift and the return of personnel and equipment is directly the transportation cost. The airlift and sealift to move this size of a force.

The two unknowns that we have attempted to try to illustrate or quantify within the backup justification material that has been submitted to the committees is the production surge acceleration acquisition is about \$6 billion worth of items that we have examined very closely for either munitions or secondary end items, tank engines, aircraft engines that have been experiencing extensive

wear and tear that it would be prudent for us to begin to put on contract soon. It would maintain a safe inventory level because the lead time is so far off that it would require that.

In the case of the production surge on certain kind of munitions there have been accelerated efforts that have occurred in the last several weeks in an attempt to deliver the assets that are currently under contract—we put under contract long before this effort ever began—that we would like to see delivery of earlier, and in the process of doing so, that would require a follow-on contract to assure there would not be an industrial breakage going on there. That number is certainly we have to assess it on a day-to-day basis depending on the intensity and duration of this particular war effort. So this is not something we would put as a priority, say that is precisely how we would spend the money. It is more of a notional description of the kinds of things that would have to be bought or that we have already been surging in order to achieve earlier delivery of assets.

Either replacement of selected assets is probably the most difficult to quantify of all. We would only propose to replace major end items, aircraft, tanks to the extent that the attrition rate has been lower than what we would have otherwise encountered, or experienced during normal training or peacetime operations. We would only replace those assets if it is consistent with an inventory objective that matches the lower force structure objectives that we have set for ourselves.

So, even to the extent that we may have experienced attrition on some selected commodities, it is greater than we would have normally been under peacetime conditions. We would not necessarily replace those assets given the fact that the force structure is declining rapidly. So that is going to be the hardest one to quantify and probably the last of the bunch that we would really be able to ascertain precisely how we would do it. But the approach that we have laid out in the Working Capital Fund and the foreign contributions usage would permit the maximum leverage to do that.

One final point, in terms of the mechanics, or the methodology of how the transfers would be made. I would anticipate that given the unconventional or unprecedented nature as the Chairman mentioned in his opening remarks of what we are proposing here. We have attempted to mirror the language precisely after the statutory construction that was enacted by Congress as part of the Defense Cooperation Account in October.

Congress in its wisdom elected to enact it that way. We saw that that was a good precedent to carry on with as part of the Working Capital Fund. We have further restricted the use of that account. Again, as a replenishment to the \$15 billion or only to the extent that it is necessary if foreign contributions are inadequate to meet the costs we will be incurring.

In the final analysis, the transfer of funds from both accounts could clearly be handled under the normal transfer authority arrangements that have been historical precedent between the oversight committees and the Department of Defense and we would honor those.

Mr. O'KEEFE. Thank you, Mr. Chairman.

PREPARED STATEMENT OF SEAN O'KEEFE

Mr. Chairman, members of the Committee, thank you for this opportunity to discuss the Administration's fiscal year (FY) 1991 Desert Shield/Storm supplemental appropriations request.

The President, as you know, has underscored that our efforts in the Persian Gulf are part of an international effort--that the struggle is not Iraq against the United States, but Iraq against the world. This sharing of responsibility between different members of the coalition has taken many forms. Its most dramatic manifestation is the combined offensives being fought, even as we speak, with Saudi, Kuwaiti and other coalition forces fighting alongside U.S. service men and women. These coalition forces--as you all know from the news of the last few days--are doing a great job militarily as they seek to enforce the UN resolutions and unconditionally eject Iraqi forces from Kuwait. While we are all heartened by the success thus far of the coalition forces, one cannot predict with certainty the precise course of the war or the peace with Iraq. Nevertheless, we are confident we ultimately will prevail.

Over the past several weeks, the Secretary and the Deputy Secretary have testified that the Administration believes the traditional Cold War threat--a massive, short-warning Warsaw Pact conventional attack into Western Europe--is very unlikely. This war against Iraq presages very much the type of conflict we are most likely to confront again in this new era--major regional contingencies against foes well-armed with advanced conventional and unconventional weaponry. Thus, the involvement of our allies in this conflict may have even greater implications for how we and they would respond to future regional conflicts.

This sharing of responsibility has proven very important in war, but could also help build an enduring peace, as we move from combat operations to enhancing international efforts to control proliferation to the region, limiting additional arms sales, and providing continued economic assistance to the recovering frontline states. We believe that the financial assistance that many countries are providing to Operation Desert Shield/Storm will encourage them to stay engaged in the region.

The types of support provided by the members of the coalition have been political, economic and military:

- The first, and most fundamental, demonstration of this responsibility-sharing has been in the United Nations in support

of the 12 resolutions that form the core of the coalition mandate in its action against Iraq.

- This responsibility-sharing also can be seen in the presence of over 60 warships from many nations in the naval blockade since the invasion.

- Nearly 50 nations have made a contribution to the coalition's military effort; about 35 countries have personnel in the area of operations. Our allies have committed nearly 300,000 troops and over 750 combat aircraft, 1200 tanks, and the above mentioned warships to the coalition facing Iraq.

- The same spirit of shared responsibility can be seen in the packages of financial assistance for the frontline states. For example, by early this month, \$14.3 billion had been committed for the August 1990-December 1991 period for Egypt, Turkey, and Jordan, and numerous other countries contributing to the international coalition against Iraq. Disbursement of approximately \$6.7 billion had occurred by early February, mainly in the form of balance of payments grants and highly concessional loans, in-kind assistance and project loans. Substantial additional disbursements are being made in the coming weeks.

We meet this morning to review our very great success in another aspect of responsibility-sharing. As detailed below, once all the 1990 commitments of our allies are fulfilled, they will have contributed cash, goods, and services, that will cover over 85 percent of our estimated 1990 Desert Shield requirements. For 1991, we expect our allies to continue their commendable record of contributions.

This degree of support from our allies is unprecedented, and it underscores the shared vision and commitment of the coalition to our common goals in the Persian Gulf. This readiness on the part of our allies to bear such a large portion of the burden in our Gulf efforts bodes well both for our efforts to militarily resolve the conflict, and to build an enduring peace in the region thereafter.

MAJOR PROVISIONS OF THE FY 1991 SUPPLEMENTAL

Last fall's budget summit agreement specified that incremental costs associated with the Persian Gulf crisis would be treated as emergency funding requirements, not subject to the defense caps in the agreement. Consequently, the President's recently submitted FY 1992-93 defense budget request and its projected long-term outlays do not reflect those costs. FY 1990 incremental costs of Desert Shield and increased fuel prices were covered by shifts in previously appropriated DoD funds (\$800 million) and by a supplemental appropriation (\$2.1 billion). We now have presented to Congress a request to cover

FY 1991 incremental costs of Operation Desert Shield and Desert Storm, at least in part.

Because it is impossible to predict accurately future operational requirements in so uncertain a situation, this supplemental does not purport to estimate definitively or necessarily fund completely what might be the eventual total cost of the war and the subsequent redeployment of U.S. forces. Rather, the primary intent is to obtain approval for a funding plan to cover our immediate and known operational requirements, to include establishing a mechanism for spending foreign contributions most effectively, in order to offset U.S. costs as much as possible. It is too early to tell whether this supplemental will cover all our FY 1991 incremental costs. But it will allow us to retire many of our known expenses and to manage our funding requirements without having to come back to Congress right away or frequently, or before we have a better estimate of the eventual total cost of Desert Shield/Storm.

The FY 1991 Desert Shield/Storm supplemental proposes the establishment of a Working Capital Account, and requests \$15 billion in new budget authority to be authorized and appropriated into the Account. This is needed to provide the Department of Defense (DoD) with the necessary funds and flexibility to meet immediate operational requirements until sufficient allied contributions are received, and to accelerate production of essential items.

This \$15 billion in new budget authority, plus the \$53.5 billion pledged by our allies, could prove sufficient to cover all our Desert Shield/Storm incremental costs. But it will be a while before we know that. More new budget authority might be needed. On the other hand, we may not need the full \$15 billion; and our supplemental proposal would give DoD the authority and flexibility to use offsets and allied contributions to achieve that if at all possible.

The supplemental also requests the authorization and appropriation of allied contributions deposited into the Defense Cooperation Account and approval for the subsequent transfer of these funds, as needed, to specific DoD appropriation accounts, in order to cover Desert Shield/Storm costs. This would parallel the flow from the Working Capital Account into DoD appropriation accounts.

To redirect already appropriated monies within DoD, the supplemental requests the transfer--from Guard and Reserve Military Personnel and Operation and Maintenance (O&M) accounts--of funds no longer needed for their original purposes to the active Military Personnel and O&M accounts. This action reflects savings in the Reserve account from the callup of large numbers of Guard and Reserve personnel to active duty.

Once appropriated, funds in the Working Capital Account and Defense Cooperation Account would be used in a specified priority.

First priority would be to finance our FY 1991 Desert Shield baseline costs, through March 1991. The term "baseline" refers to the cost to maintain and support our forces without hostilities. Hostilities add a highly unpredictable daily cost to a fairly steady baseline Desert Shield cost.

Our baseline Desert Shield costs are estimated to be \$9.1 billion for October through December 1990 and \$12.3 billion for January through March 1991. DoD has been financing these costs out of our regular appropriations, principally from the Military Personnel and Operation and Maintenance accounts. Since the military services will soon run out of authority to obligate additional funds for Desert Shield, Secretary Cheney has authorized the obligation of funds in excess of available appropriations, in accordance with section 3732 of the Revised Statutes, pending passage of the supplemental. Covering these ongoing costs will be our first priority.

Our second priority for newly appropriated funds will be for the production of missiles, ammunition and selected other items that are needed by our Desert Shield forces or will have to be replaced as a result of it. Much of this money is critical to ensuring that our industrial base remains capable of producing the items we will need.

Third priority will be \$7 billion to cover estimated costs during an orderly phasedown, after hostilities end. This includes the cost of personnel, fuel, in-theater support, and appropriate operations tempo (OPTEMPO).

Fourth priority is the \$5.2 billion we estimate it will take to return personnel and their equipment to Europe or the United States. This includes transportation, replenishment of prepositioned and war reserve stocks, return of reserve ships to non-deployed status, and payments for accrued leave of reservists.

The Department also is requesting two general legislative provisions. One would amend the FY 1991 Authorization Act, which provided flexibility with respect to the end strengths of active duty personnel, in connection with Operation Desert Shield; we are requesting similar flexibility with respect to the end strengths of the Reserve components, and for the number of members of the National Guard and Reserve serving on active duty in connection with the administration and management of the National Guard and Reserve. The second provision would permit--during a time of war or national emergency--the suspension of ceilings on the number of senior enlisted personnel on active duty. Timely passage of both these provisions will help DoD

through the enormous manpower management challenge that will face us in the aftermath of our Gulf operations.

FY 1991 DESERT SHIELD COST ESTIMATES

This supplemental makes no assumption about when the war will end, and does not attempt to estimate its total cost. However, the Administration's submission does discuss what a day of combat might cost, over and above the baseline cost of sustaining U.S. forces in the theater, absent hostilities. Costs for a day of combat would stem from increased OPTEMPO, maintenance, prisoner support, medical transportation, ammunition, missiles, and lost or destroyed equipment.

All Desert Shield-related cost estimates consider only incremental costs. By "incremental" we mean costs that are directly related to the Gulf crisis and are in addition to funds already budgeted for the forces involved. For example, incremental Desert Shield costs for an Army division are those that are over and above the budgeted amounts it would have spent if it had not deployed. The bulk of those incremental costs are due to the increased operating tempo and other preparations for possible combat under harsh environmental conditions.

Incremental costs are distinguished from total budgetary costs in that they are derived by subtracting previously budgeted funding. Incremental costs do not include previously budgeted funds for pay, training, maintenance, and new equipment for active forces deployed to the Gulf area.

Estimating incremental Desert Shield costs has been complex and difficult. At the source of the process, USCENCOM and other participating commands put together estimates of their total Gulf-related costs. The military services and defense agencies then validated these estimates and subtracted--when applicable--any FY 1991 appropriated amounts that will be foregone, to derive incremental costs. Finally, the DoD Comptroller staff scrutinized these estimates to ensure that they were properly priced, legitimately attributable to the crisis, and consistent in their derivation across all military services and defense agencies.

In sum, DoD's estimating procedures have been rigorous and, we believe, have produced sound cost estimates.

Baseline Desert Shield Costs

Our baseline Desert Shield costs cover the deployment and support of U.S. personnel in and around the Arabian Peninsula, absent hostilities. Costs include the reserve callup, imminent danger pay, transportation, fuel, in-country support, increased OPTEMPO, and special equipment. While the estimates discussed above cover only the first half of FY 1991, we have generated cost estimates for the whole year. Our full FY 1991 DESERT

SHIELD estimates are based on past and projected troop levels, support requirements, and other factors. To maintain our baseline DESERT SHIELD force, FY 1991 incremental costs would total \$39.2 billion. This estimate for the full fiscal year was formulated because this is the frame of reference in which we normally deal. It does not imply that we expect our operations to continue for the entire year.

Military Personnel. The Military Personnel categories of our FY 1991 Desert Shield baseline costs total \$10.7 billion. During the Gulf crisis, over 200,000 ready Reservists have been called to active duty. Current plans project the total reserve callup to reach 346,000 before the end of April. These reservists primarily are needed for critical combat service support. We need pilots, navigators, loadmasters, munitions handlers, aircraft maintenance, medical services and other specialties. The incremental FY 1991 cost of these activated reservists is estimated to be \$8.4 billion.

By the beginning of FY 1991, 250,000 personnel were eligible for imminent danger pay at \$110 per month. With the continued buildup, the number has increased to well over 500,000--for an annual cost of about \$700 million. Additionally, over 100,000 personnel above budgeted levels will be on active duty during FY 1991, at an annual cost of \$1.7 billion.

We have relied heavily on Guard and Reserve volunteers for Desert Shield. In the early months, about 7,000 volunteers provided support for airlift, air refueling, and other missions. This is expected to increase to 10,000, for an annual cost of about \$600 million. For FY 1991, about \$600 million would be saved in Reserve and Guard accounts, by virtue of the callup; activated reservists do not perform annual training and are paid as active duty personnel.

Operation and Maintenance. O&M costs constitute nearly 60 percent of the annualized Desert Shield baseline cost of \$39 billion. The OPTEMPO component reflects major increases above budgeted levels: 1200 (vice 800) miles per year per Army combat vehicle; and 90 (vice 50.5) steaming days per quarter for deployed Navy ships. Our estimates reflect over 260,000 additional Navy flying hours and 110,000 added Air Force hours.

In-country support includes leasing of heavy equipment, buses, and other transportation; also potable water, refrigeration, laundry services, utilities, refuse collection, increased security, communications, messing and other logistics. Incremental subsistence costs include Meal Ready to Eat rations, plus enhancements such as bread, milk, and fresh fruit.

The harsh environment and intensive use of equipment requires a substantial increase in maintenance of weapons and equipment. Medical costs reflect an increase of over 350,000 eligible CHAMPUS beneficiaries, as well as preparations to

receive and treat casualties. Other support includes communications, map production, welfare and recreational programs, additional training, and TDY support.

Investment

It is impossible right now to estimate how much equipment, ammunition and other items we will need to buy as a result of the Gulf operation. However, we now must appropriate funds to do some of that buying, even though our losses or consumption rates are not yet known. To do that, the supplemental distinguishes between two categories of required investments. In the first are items that are of immediate benefit to the forces in theater and that can be delivered by September 30, 1991. This includes combat support materiel that the theater commander believes is needed to maximize the capabilities of his forces. We estimate the FY 1991 cost of these items will total \$862 million.

The other category of investment are production surge items. These are munition items that are being consumed in Gulf operations. The primary purpose of funding these now is to guarantee the ability of our industrial base to sustain the supply of these items. Some items we may need quickly, depending on how the conflict proceeds. Others will be needed to replenish stocks after the war. Delivery of production surge items will occur during the FY 1991 funded delivery period. Examples of production surge items:

- For the Army: Patriot, Hellfire, and TOW missiles; ATACMS missile system, MLRS rockets, and certain ammunition.
- For the Navy and Marine Corps: HARM and Tomahawk missiles, and various rockets, bombs, and ammunition.
- For the Air Force: Maverick missiles, and various bombs, flares, and munitions.

Production lines for many of the above items have already been surged; the supplemental is necessary to bridge a production gap that would result from accelerating previously contracted deliveries. For other items, funding is needed now to ensure that production lines "stay warm"--even though we cannot yet determine how much restocking will be necessary.

ALLIED CONTRIBUTIONS FOR OPERATION DESERT SHIELD/STORM

Operation Desert Shield/Storm is part of an effort that is truly multinational in scope and character. In that spirit, U.S. requirements incident to deploying and sustaining the largest force in the Gulf area will be substantially offset by contributions from our allies.

Some of this allied cost sharing comes in the form of direct financial assistance. Cash received is deposited in the Defense Cooperation Account, established by Congress as part of the FY 1990 Desert Shield Supplemental Appropriation. Deposits to the Account are invested in 90-day Treasury securities. Account funds do not become available for obligation by DoD until after they are appropriated by Congress, as is being requested in this supplemental. The Department has used a mutually agreed reporting mechanism to keep Congress fully informed on the status of allied contributions and other transfers to the Defense Cooperation Account.

The other form of allied cost sharing is in-kind contributions--goods and services provided to U.S. forces directly. Most prominently, this includes Saudi Arabia's commitment to provide all host nation support for U.S. forces, both on its soil and in the surrounding waters. This host nation support includes food, fuel, water, facilities, and local transportation. In-kind contributions from other nations include materials, supplies, airlift, and sealift.

Commitments to us from our allies now total \$53.5 billion. According to our latest recapitulation, we have received \$14.9 billion in allied contributions so far. However, there is a considerable delay between the time in-kind assistance is rendered and the time we can officially account for it. Once all the calendar year (CY) 1990 commitments of our allies are fulfilled, they will have contributed \$9.74 billion in cash, goods, and services toward U.S. CY 1990 requirements, estimated to be \$11.1 billion. That comes to over 85 percent.

CLOSING

The cooperation and commitment of the many nations aligned against Iraq's aggression have been extraordinary. Now as we near the achievement of our collective goal, it is time to sort out the costs and arrange for payment of them. As we do that, we as a nation can be encouraged by the contributions--in all their many forms--of the other nations that have shared our resolve to right this wrong. And all people yearning for a more peaceful and just world order should be exceedingly proud of the military men and women who have performed so superbly and sacrificed so much on behalf of that noble end.

The CHAIRMAN. Henry.

Mr. ROWEN. Mr. Chairman, I have a short statement that I would like to enter for the record, but I'm basically here to answer questions on the foreign responsibility sharing.

The CHAIRMAN. OK, without objection the statement will be put in the record.

MR. CHAIRMAN, I WOULD LIKE TO MAKE A FEW KEY POINTS ON THE SUBJECT OF RESPONSIBILITY SHARING. FIRST, THE U.S. HAS SHOULDERED THE LION'S SHARE OF RESPONSIBILITY IN THE GULF WAR. WE DEPLOYED MILLIONS OF TONS OF MILITARY EQUIPMENT AND MORE THAN HALF MILLION SERVICE MEN AND WOMEN THERE. ALREADY, SOME OF THEM HAVE HAD TO MAKE THE ULTIMATE SACRIFICE. SO THERE IS NO QUESTION ABOUT OUR ROLE IN THIS CRISIS.

SECOND, THE U.S. IS NOT THERE ALONE. NEARLY 50 COUNTRIES HAVE HELPED OUR MILITARY EFFORT. OVER THIRTY OF THEM HAVE AIR, SEA, OR GROUND FORCES WITH US. THEY COMMITTED NEARLY 300,000 TROOPS, OVER 60 WARSHIPS, 750 COMBAT AIRCRAFT, AND 1200 TANKS TO THE CAMPAIGN.

THIRD, MANY COUNTRIES ABLE TO CONTRIBUTE FINANCIALLY ARE DOING SO. THEY HAVE GIVEN BILLIONS IN CASH TO THE U.S. AND HAVE PROVIDED VALUABLE IN-KIND ASSISTANCE. THEY HAVE ALSO GIVEN BILLIONS IN ECONOMIC AID TO COUNTRIES THAT WERE AFFECTED BY THE CRISIS. THE ALLIED CONTRIBUTION FIGURES HAVE BEEN CITED MANY TIMES SO I DON'T NEED TO REPEAT THEM AGAIN. HOWEVER, I WOULD LIKE TO POINT OUT THAT OUR ALLIES ASSUMED 88 PERCENT OF THE COSTS OF OPERATION DESERT SHIELD IN CY 1990. AND SO FAR THEY HAVE COMMITTED NEARLY \$44 BILLION TO THE FIRST THREE MONTHS OF THIS YEAR.

IT IS ALSO IMPORTANT TO POINT OUT THAT NOT WITHSTANDING THESE LARGE CONTRIBUTIONS, THE U.S. ARMED FORCES ARE NOT A MERCENARY

FORCE FOR HIRE. WE SENT OUR MEN AND WOMEN TO THE GULF TO PROTECT FIRST AND FOREMOST OUR NATIONAL INTERESTS AND TO RESTORE PEACE AND STABILITY. AS IT TURNED OUT, MANY COUNTRIES ALSO HAVE THE SAME INTERESTS, AND THEY JOINED US EITHER MILITARILY OR FINANCIALLY.

AND FINALLY, MR. CHAIRMAN, THE FINANCIAL COMMITMENTS MADE BY OUR ALLIES WILL BE DELIVERED. THERE IS NO GOOD REASON TO BELIEVE OTHERWISE. TO DATE, THE RECORD OF COLLECTION HAS BEEN GOOD. WE HAVE RECEIVED 75 PERCENT OF WHAT PROMISED FOR 1990. THE REMAINING 25 PERCENT IS IN THE PIPELINE; IT INCLUDES CASH REIMBURSEMENT AWAITING U.S. BILLING AND IN-KIND GOODS ON THEIR WAY TO US. FOR CY 1991, THE MOST IMPORTANT OPEN ISSUE IS JAPAN'S OFFER OF 9 BILLION DOLLARS. WE EXPECT A FAVORABLE JAPANESE DIET VOTE WITHIN THE NEXT TWO WEEKS.

IN SUM, MR. CHAIRMAN, FROM THE OUTSET OF THIS CRISIS IT WAS CLEAR THAT AMERICAN LEADERSHIP WAS NEEDED. WE WERE WILLING TO ASSUME THE LEADING ROLE BUT WE COULD NOT BE IN THIS ALONE. OUR ALLIES UNDERSTOOD THAT. WHAT WE HAVE ACCOMPLISHED IN TERMS OF RESPONSIBILITY SHARING IS EXTRAORDINARY, UNPRECEDENTED AND REMARKABLE. IT WILL SERVE AS AN EXAMPLE OF INTERNATIONAL COOPERATION FOR MANY YEARS TO COME. THANK YOU.

The CHAIRMAN. Bill Dickinson.

Mr. DICKINSON. Thank you, Mr. Chairman. You list \$55.3 billion from allies and then you had another chart there showing how much was pledged and how much was cash, could you place that back up there please?

Mr. O'KEEFE. These are the calendar year 1991 numbers. The calendar year 1990 figures are on a previous chart so it is two separate periods of time in which the monies were pledged, so the aggregate sum comes to \$53.5 billion.

Mr. DICKINSON. Well, now, I have got a good idea what in-kind means when we are dealing with Saudi Arabia because as the host country they are providing many many services, vehicular transportation of food, water, gasoline, but what, for instance, what does Kuwait contribute in kind?

Mr. O'KEEFE. Kuwait contributed transportation that amounted to \$4 million worth and I believe it was a lease on an aircraft.

Mr. ROWEN. It was Kuwaiti Airline aircraft which we used to carry people and goods.

Mr. DICKINSON. OK. Now, Japan, their total commitment is \$9 billion?

Mr. O'KEEFE. Yes, sir, that is the amount that is currently pending before the Diet, yes.

Mr. DICKINSON. Of that we received zip in cash, right?

Mr. ROWEN. That is for 1991, for 1990 that you will see down below—

Mr. DICKINSON. OK.

Mr. ROWEN. There was a commitment of \$1.74 billion—

Mr. DICKINSON. \$866 million they were contributing in cash to date?

Mr. O'KEEFE. That is right.

Mr. DICKINSON. Now, when it says in-kind, what has Japan contributed in-kind?

Mr. ROWEN. It has provided transportation services.

Mr. DICKINSON. From where to what?

Mr. ROWEN. To the Gulf area.

Mr. DICKINSON. From where, Japan?

Mr. ROWEN. Yes, they shipped supplies from Japan. There were transportation services, there were also vehicles of various sorts. There was a collection of equipment of various kinds. I can give you some examples, but the majority of the material that was procured by Japan was American equipment which they bought and paid for. In addition to giving us cash.

Mr. DICKINSON. Explain that to me. It went by me a little fast. American equipment that they had bought and paid for?

Mr. ROWEN. Yes.

Mr. DICKINSON. That they then contributed to the war effort?

Mr. ROWEN. That is correct.

Mr. DICKINSON. They transported it from the United States or—

Mr. ROWEN. In some cases they transported it for themselves and in some cases we transported it and they paid for it.

Mr. O'KEEFE. Primarily, Mr. Dickinson, it was things like construction materials to build temporary facilities which then the Saudi Government agreed under its host nation support agree-

ments to help construct, so they provided materials, medical equipment, you know a variety of things. Computer equipment were things that they provided. Most of it was American made.

Mr. DICKINSON. The reason I am asking about this in particular, because I would say that of all the allies or the countries that are contributing, this is probably the most visible in people's consciousness, or they are the most conscious of this because there is a feeling that Japan was a principle beneficiary and they want to know what the hell they are paying. How much are they anteing? How much is a promise versus how much have they come up with? So I did not know what the in-kind was, but they have a total of cash and in-kind of a billion three for 1990 and then an additional pledge for 1991 of nine billion of which nothing has been contributed.

Mr. O'KEEFE. That is the amount that is pending before the Japanese Diet.

Mr. DICKINSON. Now, you referred to the fact that at one point that it is costing this much to keep 500,000 troops in theater and supplied and doing whatever is necessary. Now, of the foreign troops that are there, do these figures reflect an in-kind—who pays for the expense of the French for instance and the Brits and the— not the Saudi's, but the Egyptians? Is this reflected in these figures?

Mr. ROWEN. No, these figures do not include contributions from contributing countries to foreign countries. They are just not in here. Each of the countries there has worked out the total arrangements.

Mr. DICKINSON. OK.

Mr. ROWEN. I cannot describe those.

Mr. DICKINSON. So, these figures do not reflect what foreign countries, if they field a force there, they are paying for that over and above what these figures reflect, is that correct?

Mr. O'KEEFE. This is for U.S. costs only.

Mr. DICKINSON. All right. Well, I think we will have to go into more detail, just the mechanics of it. You have got a foreign contribution pool here, and we have got our \$15 billion here, and what you anticipate doing is drawing out of the \$15 billion as long—well, you are going to draw down on the foreign contributions until there is nothing left?

Mr. O'KEEFE. Exactly right.

Mr. DICKINSON. Then when there is zero there, then it comes out of the \$15 billion that we put up, am I correct?

Mr. O'KEEFE. To the extent that is necessary, yes, sir.

Mr. DICKINSON. But again, does this go by any sort of line item, line in, line out?

Mr. O'KEEFE. Yes, sir. It would work mechanically—we would propose to transfer the funds from the Foreign Contribution Account in the manner prescribed by the Act when it was set up back in October directly to the Defense Appropriation accounts which are eligible, which are predominantly operations and maintenance personnel, and then use the Working Capital Fund only to the extent that the balance of the account at any given time be zero in costs needed to be met.

As soon as the foreign contributions would then be replenished to the Defense Cooperation Account, we would then establish a mechanism by which we could replenish the \$15 billion so that it leaves open the possibility, it is—I do not know how likely this will be, because it depends on the length of time that this is going to go on and the intensity of it. But it leaves open the possibility that if at the end of the day there was anything left, it will be U.S. dollars that are left for the purpose of either reverting to the Treasury or for Congressional disposition.

Mr. DICKINSON. But I do not want to monopolize the time, but there is one other point I want to clear up. Now, we were told by Secretary Cheney and General Powell that you will have two accounts, one is Desert Shield and one is Desert Storm and they are two different pockets and they will be treated differently.

Desert Shield has everything, pays for everything going up to the actual hostilities plus bringing the troops home that have nothing to do with hostilities.

The Desert Storm pocket has to do with whatever has been expended in the warfare, whatever is attrited or whatever has been destroyed and so forth and tell me how that is reflected here?

Mr. O'KEEFE. That is a notional way, what they have described to you is a notional way of describing the cost estimates, is the cost involved are—I do not know how good the estimates are, but at least you can come to some reasonable guess on what the estimated cost would be for the shield portion of this. By Desert Shield portion they are referring to the baseline expenses to keep some 500,000 people in theater supported to continue to prosecute the effort.

The hostilities then is a cost above that for combat expenses which would be paid from either direction here, depending on what the circumstance is. But it is very little on additional operations and fairly intensive in terms of loss or attrition rate of aircraft, tanks, etcetera which ranges in cost depending on how good the weather is and how intense the battle is that day from as low as \$150 million to as high as \$1 billion.

Mr. DICKINSON. All right. Why do we make that distinction as to what Desert Shield versus Desert Storm. From where I sit it is all the same. It must make a difference to you?

Mr. O'KEEFE. The difference is, this falls into the category of time is the very best budget analyst there is. The longer you look at the actuals as they come in, the better off the data is going to be. In the case of the hostilities or the actual combat expenses, it is almost impossible to quantify on a daily basis exactly what has been expended, what the actual costs of that day are because the last thing we want the accountants to be doing is running the pace of the war or to be dictating whether the paper work ought to be done, so that is the part that is very very difficult to quantify, and it assumes—

Mr. DICKINSON. You are making my point, what is the difference?

Mr. O'KEEFE. Because that is the amount you do not know what is involved. You do know what it takes to keep that many people deployed in the theater and that is the part that we are attempting to justify on the basis that we have some handle on as opposed to

the part that we really cannot quantify which is the intensity of the war as well as the duration.

Mr. DICKINSON. But what I am interested in is how much is coming in and how much is going out? I do not give a damn how you break it down, but maybe that makes a difference to the bean counters. I will yield back to the Chairman. Thank you.

The CHAIRMAN. Let me ask a couple of questions. First of all, Sean, where did the \$15 billion come from? Why not \$10 billion, why not \$20 billion?

Mr. O'KEEFE. There is virtually no magic to the \$15 billion. It is a number that was discussed during the course of the budget summit deliberations. The OMB Director felt a responsibility to make sure that there was a specific requirement tagged back to that.

As part of the 1992 budget submission, the Comptroller General estimated that the cost of this effort will be \$30 billion. We had no basis upon which to refute or deny or support that estimate, but that was put in as a place holder in the budget. The assumption is part of the summit agreement itself, was that not less than 50 percent of the cost would be borne by the allies. So, divisible by two of 30 is 15 and that is—there is no real magic to it, other than trying to find an estimate that is recognizable, that has some degree of understanding in the agreement as part of the budget summit package to demonstrate, that yes in fact, we are going to adhere to the principles and the limitations contained therein.

The CHAIRMAN. OK, let me ask the second question. The second question of course is the problem that we have got with this thing which is that we are in a sense appropriating—authorizing appropriating money here for which there is no line item, but what we have is notional list of the kinds of expenditures that might be covered by this. The question is, how do we satisfy that? I mean we do not want to tie your hands, but on the other hand, you know the notion of just an open checking account without an idea before hand of what you might want to spend the money on has got some severe problems over here?

Mr. O'KEEFE. Well, clearly, Mr. Chairman, the operations costs and the personnel expenses we know we are incurring. The expenses from October to March are roughly \$21.5 billion, is what we estimate to be the cost for that particular underlying expense, no combat cost above that. We know it is going to cost us something to withdraw and to transport all those folks.

In aggregate we have identified \$40 billion worth of what we think are hard requirements that stem from this without ever assuming a single dime worth of replacement of any assets stemming from the hostilities of the combat engaged itself.

Again, the formula presented, rather than presuming that the United States direct appropriations ought to cover specific categories of expense, we have proposed it in a manner to leave that particular prerogative either to the Congress if that is your elective call or to the extent that that is the ultimate accounting actuals at the end of the day if the foreign contributions are adequate to settle it without the use of said funds.

So it is unconventional, but it is designed to make sure that the United States Government's priorities financially are protected as

much as possible and also to use as a means to encourage the allies to honor the commitments which have been made by those sovereign states at the highest levels within those governments so we have no reason to doubt their intention to make good on those commitments.

The CHAIRMAN. No, I think the aspect of this thing which is to encourage, one of the things we were concerned about was that we have a system here that does encourage the administration to try and get the foreign countries to collect and I think you have come up with a good one, because essentially you are saying that you have got \$15 billion there, but that is just to be called on in the case that the money in the account does not cover it any one time. I think you have done well with that.

The problem is essentially, we would like—our ordinary process of course is to have a line item as an ordinary budget is that we see ahead of time what the money is going to be spent on before the fiscal year begins or at least before you spend the money and it is laid out in a very specific term which is what we do with the annual budget.

What you are talking about here essentially is a checking account, an account to be drawn on, as you say mainly from the foreign sources and then our taxpayer money here, \$15 billion is a back up, but essentially you have the authority to spend that money on whatever you want and I guess notify us afterwards. It is a notification after as opposed to getting approval before?

Mr. O'KEEFE. Yes, sir, Mr. Chairman, you have described it accurately. It is a question of how the transfer authority would be utilized by the administration and clearly that is a point of negotiation that I think can be worked out professionally. We clearly have had no problems with the use of transfer authority and how the specific construction of that is designed in the past. We clearly could reach understandings on that point as well. The absence of specific appropriation account designators of U.S. taxpayer dollars does leave open this prospect. That is a trade off, there is no question.

But it is one that if we could reach an understanding among the oversight committees may leave that prospect we would not otherwise have.

The CHAIRMAN. What is your view of this idea that is being kicked around that we treat it like a reprogramming, that you come up and get the approval of the four committees, that we would move it—we would pledge to move it very quickly, but essentially we get some kind of prior notification, how does that sound to you?

Mr. O'KEEFE. We are always delighted to work with this committee and all committees of oversight, Mr. Chairman. To the extent that—

The CHAIRMAN. I am glad to hear you are so cooperative, Sean, it is not always the case, but I am glad to hear you say it.

Mr. O'KEEFE. Begging your pardon, sir, I have always attempted to be as cooperative as I could be. To the extent that we could reach a very firm understanding on the limitations on the deliberation, I think that would expedite the process.

As it stands right now, we are running out of cash, as it is. We have invoked the Food and Forage Act for two very limited operations, the Army and Marine Corps, because we would otherwise just be flat broke unless we did that, so it is getting to the point where if the accounting process dictates the pace and flow of the activity in the theater, that is something that I am sure—

The CHAIRMAN. Then you have got a problem.

Mr. O'KEEFE. I am sure the Secretary will have major problems with that.

The CHAIRMAN. No, no. We would not want to do that, and I think that we can work the thing out.

Thank you very much. Charles Bennett.

Mr. BENNETT. A number of production lines are scheduled to close in fiscal year 1992, for example, Patriot and Maverick.

Has the war with Iraq changed your plans with respect to the production of any system previously set for termination?

Mr. O'KEEFE. Not at this time, sir.

Mr. BENNETT. Do you ultimately intend to recoup from our allies the cost of all military construction and related materials in Southwest Asia?

Mr. O'KEEFE. It appears to be trending that way. The construction expenses, the military construction costs that we project for the temporary housing and storage, are largely being met by either material assistance that is being provided other governments and constructed by the host nation, in this case Saudi Arabia, and largely that is being met.

I believe that we are incurring some military construction oversight kinds of cost in terms of, the safety standards, et cetera, that are being administered by the Defense Department officials, but other than that, all the cost of labor and construction, materials, et cetera, is being met by the contributions in-kind.

Mr. BENNETT. How much of the funding requests for medical programs is due to increased CHAMPUS costs associated with the deployment of doctors or the added CHAMPUS workload?

Will there be a non-Desert Shield CHAMPUS pre-program as well?

Mr. O'KEEFE. Yes, sir.

Mr. BENNETT. Well, you could put it in the record, if I am holding you up.

Mr. O'KEEFE. The total cost is \$804 million throughout the course of the year. The CHAMPUS, we expect in the very near period looks like it works out to be about \$230 million roughly, is the cost that we expect to accrue for two things.

First of all, prominently from the eligibility now of dependents of reservists who have been called to active duty, as well as the additional cost of CHAMPUS because of the non-availability during that lag period in which active medical support medical personnel were called to service in the region, and we are waiting to fill in behind with the reserve personnel.

Mr. BENNETT. It was my legislation that shortly after World War II brought about the imminent danger pay, reconstituted it in a larger sum than it was in World War II, and I would like to ask the question: Does the administration support an increase in imminent danger pay above the current level of \$110 a month, and if so,

who will pay for it? Will it come out of this, or will it come out of ultimate other programs?

Mr. O'KEEFE. On the question of is that eligible here, yes, the \$110 per individual is being paid as an incremental cost here. What the administration's position is on the increase, I do not know. We can provide that for you for the record, sir.

[The following information was received for the record:]

IMMINENT DANGER PAY

Hostile Fire/Imminent Danger Pay was last increased by Congress in fiscal year 1986. At that time the rate was increased from \$65 per month to the current rate of \$110 per month. While the Department has never initiated legislation requesting any further increase, we support the proposed increase to \$150 per month included in the DESERT SHIELD/DESERT STORM supplemental.

Mr. BENNETT. I have not further questions.

Mr. O'KEEFE. Thank you, Mr. Bennett.

The CHAIRMAN. Mrs. Byron.

Mrs. BYRON. Thank you, Mr. Chairman.

Let me touch real quickly for Mr. Bennett on the imminent danger pay, because we have looked at increasing it. It is in the package that we are going to bring before this committee hopefully next week and go to the floor with, and it is in part of the supplemental Desert Storm package, so I think that should answer you question, Charlie.

Mr. O'Keefe, let me ask a couple of questions here. We are talking about a \$48 billion commitment, \$6.8 billion in cash, \$7.5 billion with the in-kind available.

Where are we going to be looking at Turkey and Egypt for the amount that they have lost as far as income? Will that come out of that major bulk of the \$48 billion commitment, Turkey for the closedown of their pipeline, which was a heavy, heavy part of their GNP, Egypt for the closedown of the Suez Canal and the impact that that has had on their economy?

We have talked about expecting a few POWs. We are now up over 50,000 POWs. Who is going to be or what financial mechanism is going to feed and take care of those? I know the Saudis are the final designated holding for POWs.

Medical needs under the Geneva Convention will be met. It seems to me that most of those medical needs will be met by U.S. medical units that are on the scene.

Will that be a factor coming into play as far as cost is concerned?

Then as we look with great anticipation at the return of the U.S. troops that are currently in the desert, transportation costs for those returning troops. In a lot of cases, we sent troops and material by air that more economically it would have been possible to send by ship, but the time commitment and the need was there to send them by air.

Will we be tapping the Japanese and the Germans to return troops and equipment with their aircraft or ship bottoms. I know the Japanese Diet is still debating on whether their commitment will be forthcoming, and I believe, it is my understanding, Germany contributed or authorized the use of some aircraft.

Mr. ROWEN. Let me answer the first two of the questions you have raised or address them.

This display here and this discussion has to do with contributions to the U.S. for defense-related costs. This is quite an independent operation that has been going on, that involves contributions by other countries to other countries; that is, to——

Mrs. BYRON. I understand that. But we are going to see a foreign aid bill that is going to be coming down and say, Country X, Country Y, and Country Z are needing an increase in their foreign aid, which is U.S. funding. So as a result, I think we have to look at——

Mr. ROWEN. That is right. That is another arena. But just so you know that there is this Gulf crisis Financial Coordination Group that has committed \$14.7 billion. That is calendar years 1990 and 1991. Two such recipient countries are Egypt and Turkey. So that has been ongoing independently of what we are discussing here.

Mrs. BYRON. So we should not expect in the Congressional arena to see a foreign aid bill containing funding for Turkey and Egypt?; is that correct?

Mr. ROWEN. Oh, no, I would expect that you will see something emerging in the foreign aid bill, but I am saying that is independent of the subject of the display we have here and the discussion going on here.

You can certainly expect that that will be coming up.

With regard to the POW question, there are, of course, a lot of people out on the ground who are being fed while they are prisoners and medical needs and so on, as you have described it.

I do not know the exact arrangements, how it is set up, but with regard to feeding people, for example, the Saudis have made arrangements for host nation support, providing our people food, plus taking care of their own people, and I imagine that is——

Mrs. BYRON. That probably will work, because they do not seem to like MREs.

Mr. ROWEN. I beg your pardon?

Mrs. BYRON. That probably will work, because they do not seem to like MREs.

Mr. ROWEN. In any case, I think we can say that that is really all part of the process that has been agreed to.

On the question of transportation, Mr. O'Keefe will address it.

Mr. O'KEEFE. To the question on any international assistance, there are two supplementals that are currently pending before Congress right now, this one and there is a very limited \$90 million supplemental for domestic agencies of the Federal Government that have some indirect association with the impact of Desert Shield, which is being exercised under the present authority for emergencies and extraordinary expenses, as opposed to under this particular provision of the Enforcement Act, which is clearly permissible above the caps for incremental expenses.

Now the question of international assistance, to your specific points, could you expect to see bills in Congress, clearly the administration has none pending that I am aware of in this or any other vehicle up here.

The transportation question, we have factored in. Our estimates here are \$5.2 billion to withdraw the troops, to physically transport the troops and equipment to their destination, be it back to the

United States, to Europe, or wherever the Secretary intends to disburse the forces upon return.

That clearly, as I mentioned to Chairman Aspin in his questioning, to the extent that those costs can be met within the amounts provided for by the foreign contributions that have been made thus far into the Defense Contribution Account, it would be our intention to settle those expenses from those foreign dollars that have been received, as opposed to through the working capital fund.

So the best of all circumstances would be that they would, in fact, be bearing the cost of that return; yes, ma'am.

Mrs. BYRON. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. McCrery.

Mr. MCCRERY. Thank you, Mr. Chairman.

I have to admit I am a little confused, and maybe you can help me sort out these numbers here.

Referring to Charts 2 and 5, both of these are labeled "Desert Shield", but I take it that that is Desert Shield and Storm? You just put "Desert Shield" to be brief?

Mr. O'KEEFE. I am at an unfair advantage here, Mr. McCrery using the presentation I made.

Mr. MCCRERY. I apologize for referring to your charts.

Mr. O'KEEFE. On Charts 2 and 5—

Mr. MCCRERY. It says "Desert Shield", but you mean Desert Shield and Desert Storm?

Mr. O'KEEFE. No, sir. It is Desert Shield up through January 16 and the cost to sustain the force in the theater, no estimate at all for combat expenses.

Mr. MCCRERY. Right.

Mr. O'KEEFE. So it is essentially the baseline costs of Desert Shield/Storm activity; yes, sir.

Mr. MCCRERY. But the timeline would carry through—

Mr. O'KEEFE. March, yes, sir.

Mr. MCCRERY. When Desert Storm started.

Mr. O'KEEFE. Correct. That is exactly right, sir.

Mr. MCCRERY. I understand.

Now when you say in your statement that \$11.1 billion is the cost of Desert Shield for calendar year 1990, and we have received, or we expect to receive 9-point-something, and that is 85 percent.

Mr. O'KEEFE. Yes, sir.

Mr. MCCRERY. Does that \$11.1 billion include the cost of transporting all the troops from Europe and the United States to the theater?

Mr. O'KEEFE. It covers the costs from about August 15, which is when the effort started, through until December 30, and it covers the cost of the first 225,000 troops that were deployed in that period from August to November. As you recall, the President increased the commitment and the troop deployment by another 275,000 or 250,000 on or about the 15th of November.

So the cost to transport the first wave is covered or captured in that particular time period, and then a good portion of the cost to accelerate the deployment to the over 540,000 personnel we have is largely covered in the December and January numbers.

So a fair amount of it shows up, but an awful lot more shows up in January principally. For example, in the \$12.3 billion estimate

that we have for the period of January to March, in that first month \$4.7 billion of it is incurred in January, because it is the last wave of the additional folks building up to 540,000 is there. By March, it settles down to a sustaining cost of about \$2.9 billion.

Mr. McCRERY. So all of the transportation costs of getting all of our troops over there are covered in either the last quarter of 1990 or the first quarter of 1991—

Mr. O'KEEFE. Yes, sir.

Mr. McCRERY. In your estimates.

Now if we wanted to arrive at a total cost for this entire operation, incremental costs, we would add up on Chart No. 5 of yours the \$9.1 billion, the \$12.3 billion for Desert Shield—those are the baseline costs including transportation to date—the post-combat phase-down cost of \$7 billion, the return of personnel and equipment, those transportation costs are \$5.2 billion, and the production surge/accelerated acquisition which we do not know yet, and whatever we decide to replace in terms of the assets expended in this operation?

Mr. O'KEEFE. Yes, sir.

Mr. McCRERY. That would be our total bottomline cost for the operation?

Mr. O'KEEFE. If you assume that all activities close at the end of March.

Mr. McCRERY. Correct.

Mr. O'KEEFE. That is exactly right.

Mr. McCRERY. You do not yet have—I mean, assuming that it does end by March 31st, you do not yet have any idea as to what these last two categories will be, a ballpark figure?

Mr. O'KEEFE. I think, as a matter of fact—I apologize here; Congressman Spratt and I had a discussion about this earlier this morning in the House Budget Committee—what we have provided for in the justification material under the surge and accelerated acquisition is notionally a list of about \$6 billion of the kinds of things that we know we are expending, we know we are consuming, and that in many cases, not all, we have specifically sought an acceleration of the delivery of assets in order to affect the outcome of the effort in the Gulf.

So that \$6 billion could easily go down, depending upon the intensity of the effort, and given the favorable trends these days, I would expect that would be a reasonable thing to suppose.

Then the last one is the most difficult to quantify, because again it is based on two very, very clear parameters, the first of which would be replacing things, only if it is in excess of normal operating peacetime training attrition rates, and then second the other rigid means test we put to this will be replacement of assets consistent with the lower inventory objectives to match the lower force structure.

So we do not want to replace anything that is going to be in excess of what we would need for a smaller force structure.

So those are the two toughest ones to quantify.

Mr. McCRERY. But on the last one, you do not have any idea yet?

Mr. O'KEEFE. I would not even hazard a guess. It is just too tough to tell. At the end of the day when this is concluded and we know when Hussein has accounted for all 12 U.N. resolutions and

everybody has started to come home, we will start to get a feel for this kind of stuff.

Mr. McCRERY. But evidently, you believe that that figure could be small enough to make the entire costs, incremental costs for Desert Shield/Desert Storm less than the allied commitment that has already been made to us?

Mr. O'KEEFE. This particular funding methodology does set up that possibility; yes, sir. It leaves open that prospect. To the extent that that becomes a reality, then the U.S. contribution to this effort may be minimal or non-existent by this funding methodology.

Mr. McCRERY. All right. If, then, that comes true——

Mr. O'KEEFE. If you are an optimist, yes.

Mr. McCRERY. Yes, well, if it does come true, then what happens to the excess in the working capital account?

Mr. O'KEEFE. It reverts to the Treasury. It is a Treasury account, and it is available for Congress to dispose of in any manner, in its wisdom, it sees fit.

Mr. McCRERY. OK. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Hutto, then Mr. Foglietta.

Mr. HUTTO. Thank you, Mr. Chairman.

First, I want to ask a question that the gentlelady, who is chairman of the Military Construction Subcommittee, who could not be here, wanted me to ask.

She indicates that on Chart 2, it shows \$600 million in incremental costs for military construction in support of Desert Storm. Is this amount offset by in-kind contributions? Do you expect any of the requested \$15 billion to be used for construction of facilities and related costs?

Mr. O'KEEFE. Yes, sir. It is my understanding that the material that has been received thus far as in-kind assistance from various contributing allies, plus the host nation support agreements which cover the basic expenses to build using those materials, that is largely accounted for as in-kind assistance. So either that, or we would cover it by direct cash foreign contributions. But it is largely covered for by in-kind assistance.

Mr. HUTTO. Do you expect any of the requested \$15 billion to be used for construction of facilities and related costs, and what would they be?

Mr. O'KEEFE. It is highly unlikely.

Mr. HUTTO. OK. Did I understand you, Mr. O'Keefe to say that about 60 percent of this is O&M; is that right?

Mr. O'KEEFE. Yes, sir, that is correct. About \$23 billion of \$39 billion estimate is accounted for by operations expenses.

Mr. HUTTO. Will you be spending the funds made available specifically as described in the supplemental request, and if not, how do you plan to advise us of the actual expenditures?

Mr. O'KEEFE. Clearly, for the first quarter of 1991, which covers the period of October to December, we can specifically identify the \$9.1 billion that we have incurred, and we would propose to spend it exactly in that manner as displayed in the justification materials.

For the period of January to March, we believe the estimate of \$12.3 billion is pretty good, and that is precisely how we propose to

spend it there. So clearly, of the \$21 billion that was justified in the backup material, that is how we would spend it.

Mr. HURRO. The supplemental request provides substantial authority to the Office of Management and Budget and to the DoD to transfer funds to the working capital account from the Defense Cooperation Account.

I guess you gather that we have a lot of concern that this does not provide a whole lot of oversight as to the expenditures, especially considering that the numbers presented are mere estimates.

So what is the plan for Congressional oversight of the transfer authority provided for in the general provisions?

Mr. O'KEEFE. Well, the proposal which Chairman Aspin explored certainly would be acceptable to the Department in terms of following through on the normal transfer authority arrangements and agreements that we have with the oversight committees of Congress.

Again, the approach, the conservative approach we could have pursued to specify specific categories of funding to be financed by U.S. direct appropriations could have been submitted that way. However, what we are attempting to do here is provide the possibility that those costs may be defrayed largely by foreign contributions, and at a minimum, the \$15 billion would not be used until necessary at the close of the effort, and once we have exhausted all of the contributions that have been collected.

So we would clearly work with the committees to work out an agreeable solution in terms of transfer authority requirements and how to use the funds within a specific appropriation account designated; yes, sir.

Mr. HURRO. You do not believe that we would have the unprecedented event of having some money left over, do you?

Mr. O'KEEFE. I guess being an eternal optimist, you have to believe that there may be that possibility, and to the extent that it is, this approach permits it.

I would not want to foreclose that opportunity by having submitted it or having the administration submit the proposal in a manner that would permit that opportunity. So whatever shot you think it is, whether it is a long shot or a short shot, it at least permits that opportunity in this method that could not otherwise be achieved.

Mr. HURRO. As I understand it, Mr. O'Keefe, you do not consider replacing unneeded inventory that was consumed in Desert Storm as an expense. It seems to me it would be an expense, an appropriate expense, regardless of whether you replace it or not, especially if the Defense Cooperation Account is going to pay for these items.

How do you plan to treat that issue?

Mr. O'KEEFE. With all due respect, sir, we do, in fact, consider it to be a cost of the war. It is not estimated here as part of the baseline expense in the presentation we have made today. It is notionally captured in that daily cost of the war effort, depending on how intense, as well as how much the loss rate was on any given day.

At the end of the war, we certainly will have the responsibility to calculate up the losses that we have incurred on major inventory, major assets, and make the determination of whether we want to replace those assets equivalently and one-for-one.

The two rigid criteria, again, that we are attempting to overlay on this is to assure that we not be replacing equipment if the attrition rate was less than we would have otherwise experienced under peacetime operations, which is again part of the limitation we believe is contained within the budget summit agreement to cover only incremental cost, and second, a more rigid test that we are imposing on ourselves is that we not replace assets that we know would create or provide for an inventory that is greater than the smaller force structure we are anticipating in the future.

So we are going to have to make that judgment call as we go down the road in terms of the specific losses that have occurred, but we intend to adhere to those two criteria principally.

Mr. HUTTO. Thank you. Thank you, Mr. Chairman.

Mr. O'KEEFE. Thank you, Mr. Hutto.

The CHAIRMAN. Tom Foglietta.

Mr. FOGLIETTA. Mr. Chairman, may I suggest that in the future the quadrupled that holds the charts be adjusted, so that we at the far right can get a better view of what is being shown? We really cannot see it from here. We have been adjusting our necks to do that.

I would like to follow up on a question that was asked Mr. Hutto, and, in fact, being behind Mr. Hutto usually deprives me of asking most of the questions I would like to ask.

But I would like to follow up on one. I understand now that the incremental cost—well, first of all, we have \$15 billion which you are asking for today, plus the \$53 billion that has been pledged by our allies. We are talking \$68 billion in general, round figures.

Now if we deduct the incremental costs from that of approximately \$40 billion which was expended, are we stating that the war is going to cost, estimating the cost at \$28 billion or about \$666 million a day?

Mr. O'KEEFE. No, sir. Clearly again, the basic problems we had in developing any kind of estimates here was, you have to make assumptions about intensity and duration, and even when this particular package was finally presented to Congress on Friday, that picture was not very well known.

It has cleared somewhat since that time, and depending on how optimistic you are in terms of the extent and duration of this particular conflict, it is conceivable that the costs involved could be captured as small as we have laid out here. If you also overlay on top of that the combat expenses, their operations costs minimally that go along with that, higher flying rates, et cetera, a lot of spare parts that are consumed, and then you have the major asset end item issue that Mr. Hutto and I just discussed.

So conceivably, this number could be as small or as big as you want it to be, depending on how long this goes on and how fierce it is, and that is something we bean counters just cannot put an estimate to. We do not know.

Mr. FOGLIETTA. So there is a possibility, then, that we might wind up in the black in this thing?

Mr. O'KEEFE. It depends on how optimistic you are, and we are trying—

Mr. FOGLIETTA. How much we are able to collect.

Mr. O'KEEFE. Yes, sir. This approach is designed to permit that possibility or, more importantly, only use the U.S. Working Capital Fund to the extent necessary if the foreign contributions are either inadequate or if there is any lag at all in their arrival.

So we are trying to make sure that we protect the U.S. Government's options, in terms of how to retire the cost of this and the future expected expenses.

Mr. FOGLIETTA. Most of our discussion today is centered around the war itself and then the returning of the troops back to the United States or other areas after hostilities are over.

Has any thought been given or any plans been made or any estimates made as to what the cost might be of a peacekeeping force in that area, including the possibility of the cleanup and who is going to bear that cost and how is it going to be divided among our allies and ourselves?

Mr. ROWEN. There are two parts to that. One has to do with the cost of the peacekeeping force, and there really isn't any such estimate available. It is an idea which has been mentioned, but it is not firm enough so that we have any cost estimate.

In regard to the cleanup cost, I am not sure what you mean. If you are referring to the—one obvious major cleanup cost is the cost of the reconstruction of Kuwait. That is going to be borne by the Kuwaiti Government.

There is nothing in here on that subject, and this is addressed to the military cost, not to the reconstruction costs of the cleanup.

Mr. FOGLIETTA. Well, I am not talking specifically about reconstruction cost, but in other words, I guess the conclusion we can draw, that once we withdraw our troops, that our operations will be over in that part of the world?

Mr. ROWEN. Oh, I understand now. Again, that is a subject which about very little can be said at this point. The nature of our future posture there, and the nature of the security system has gotten some consideration. The Arabs are discussing it amongst themselves, what kind of a security system they would like to see organized. We have given some thought to it.

It is really premature. We really do not know. A lot of it is dependent, of course, on the situation that exists at the end of this phase of the fighting, and it has not really been possible to be very definitive about what comes after it until we see what we have left.

So I think I cannot really say much more than that. We do not have a firm position on that subject.

Mr. FOGLIETTA. I thank you, sir.

The CHAIRMAN. Herb Bateman.

Mr. BATEMAN. Thank you, Mr. Chairman.

Mr. O'Keefe, you are apparently asking legislative waivers of the end strength requirements that are in the fiscal year 1991 authorization bill. I do not remember the figures, but for each of the branches of the armed services, there were decreases in authorized end strength, and yet I think it is probably correct that each of the branches of the armed services presently have more people on active duty today than the did when the fiscal year 1991 authorization bill took effect.

Very properly, then, you are asking for a waiver. Are you asking for enough, because it is not just a matter of authorizing a waiver

of the decreases for fiscal year 1991, but the inability to have made them creates a turbulence and presents problems for DoD and the manpower managers to be able to work down the force within the timeframes originally contemplated over 4 or 5 years?

Are you asking for enough, or are you going to be presenting some risk of having to draw down our forces in a way that would be very unfair to some people that I am sure deserve the maximum considerations of fairness from us?

Mr. O'KEEFE. Yes, sir, Congressman. By separate transmission, we have forwarded a request to waive the authorized limitations for the end strength at the end of calendar year 1991. You are exactly right. That totals about 100,000 personnel, which we are to have come down in fiscal year 1991, that we view now as no longer possible to achieve all of that.

But in terms of, is it enough, the waiver itself would provide for the exclusion of any end strength limitations and therefore let the numbers rise to where they are.

Second, we have put in the cost estimate as an incremental expense attendant to this. The additional number of folks we anticipate keeping on the rolls throughout this fiscal year, and that totals about \$1.3 billion, if you assume that they are retained all the way up until September 30, and that is probably unlikely.

But again, erring on the side of conservatism, we have loaded in that number throughout the course of the fiscal year.

To the extent, for example, if the Army were to revoke stop loss at some point and permit the folks who would otherwise have retired during this period of time to leave, we do not have the foggiest notion of what that number would be.

So as soon as we have some idea of what may occur in terms of coming down the end strength curve again, we will be able to assess what the total number ought to be for the year included by the time the committee proceeds towards markup on the authorization bill for fiscal year 1992, and we will have a better fix at that time on where we are heading. We have attempted to cover the bases as far as we could, sir.

Mr. BATEMAN. I guess that really puts it in focus. My concern is whether or not the fiscal year 1992 submissions are going to make any sense in terms of the Desert Shield/Desert Storm realities and the ability, with fairness, to be able to draw down the forces within the timetable and in the numbers that we have previously been talking about.

Another question that I would ask is whether or not you are fully taking into account in any of these categories the phenomenon that you are using up engines, or you are using up ships, you are using up all kinds of military equipment at a rate that is greater than its normal life expectancy, given the operating tempo and conditions that you have been utilizing it?

Is that being considered here, and I am sure significant cost in naval ship repair and overhauls that are going to be necessary because of the operating tempo that the ships have put through? Are all of those things taken into consideration?

Mr. O'KEEFE. Yes, sir. We have built into the estimate for the full fiscal year about a \$2.2 billion incremental cost that we expect as a result of the increased wear-and-tear. On average, the overall

operating time is about 50 percent higher than we would normally have experienced.

Tanks are driving 1,200 miles roughly on average, as opposed to the 800 mile average that we had built into the baseline cost estimate. Tactical aircraft are flying about 29 to 30 hours per month, as opposed to the baseline of about 19.5 to 20 hours. So we are seeing those kind of increases.

But for right now, what we are seeing is a decrease in some of the maintenance costs in some areas because of the use of the assets in the theater.

Shipyards, for example, there are a total of 23 ships that would have otherwise been required to go in new ship overhaul or limited, restricted availability of some type. That has been replaced by fourteen vessels that were not due for deployment to the theater, so they have now been accelerated for their industrial availability.

But I fully expect that once the effort is over, we are going to see a dramatic increase in the equipment maintenance. So we have built in this factor, because the wear-and-tear factor, the wear-out rate, appears to be running about three times greater than it would be on average for spare parts, for the material itself, and we have attempted to build some of that in here to try to prepare for the major industrial workload in our facilities that we have dealing with the overall wear-and-tear on the equipment that we have out in the theater of operations.

Mr. BATEMAN. Thank you.

The CHAIRMAN. Mr. Foglietta has got a question? Oh, go ahead.

Mr. SISISKY. I just wanted to follow through on what he was talking about.

You did have 23 ships. I noted that. The Navy O&M is \$472 million. Now you are replacing nine ships. I do not really understand that.

If the operating tempo is that great, are you planning for another supplemental. Obviously you are going to need another supplemental.

Mr. O'KEEFE. No, sir. As you mentioned, what is going on is, there has been a decline in the overall industrial availabilities, because the ships have been deployed to the theater of operation.

Concurrently, though, there are a number of ships that were due for industrial availability that we have accelerated and put into the shipyards in order to fill that particular timeframe. Once this is over and they come back from the theater, we expect a major upsurge, and so that \$472 million is there as the—that is a net number increase of what we expect will be the maintenance requirements for U.S. Navy vessels returning from the theater of operation.

Mr. SISISKY. Is it possible that you could get me a copy of the 23 ships and also the 14 ships, because I would like to look at that.

Mr. O'KEEFE. I'd be delighted.

[The following information was received for the record:]

There are twenty-three ships involved in Desert Storm operations that have an fiscal year 1991 depot availability that was at risk due to the ships being deployed during their scheduled start dates. These ships are listed below:

U.S.S. <i>Ranger</i> (CV 61)	U.S.S. <i>Saratoga</i> (CV 60)
U.S.S. <i>America</i> (CV 66)	U.S.S. <i>John F. Kennedy</i> (CV 67)
U.S.S. <i>Turner</i> (CG 20)	U.S.S. <i>Princeton</i> (CG 59)
U.S.S. <i>Foster</i> (DD 964)	U.S.S. <i>Caron</i> (DD 970)
U.S.S. <i>O'Brien</i> (DD 975)	U.S.S. <i>Harry W Hill</i> (DD 986)
U.S.S. <i>Halyburton</i> (FFG 40)	U.S.S. <i>Durham</i> (LKA 114)
U.S.S. <i>Ogden</i> (LPD 5)	U.S.S. <i>Denver</i> (LPD 9)
U.S.S. <i>Iwo Jima</i> (LPH 2)	U.S.S. <i>Okinawa</i> (LPH 3)
U.S.S. <i>New Orleans</i> (LPH 11)	U.S.S. <i>Portland</i> (LSD 37)
U.S.S. <i>Whidbey Island</i> (LSD 41)	U.S.S. <i>Fort McHenry</i> (LSD 43)
U.S.S. <i>Saginaw</i> (LST 1188)	U.S.S. <i>Fairfax County</i> (LST 1193)
U.S.S. <i>Sylvania</i> (AFS 2)	

There were 14 non-Desert Shield ships with early fiscal year 1992 Depot maintenance availabilities that were identified as potential ships that could be shifted into fiscal year 1991 to compensate for the loss of the fiscal year 1991 Desert Shield ship depot availabilities. These ships are as follows:

U.S.S. <i>Truxtun</i> (CGN 35)	U.S.S. <i>Arkansas</i> (CGN 41)
U.S.S. <i>Kincaid</i> (DD 965)	U.S.S. <i>Cushing</i> (DD 985)
U.S.S. <i>Fletcher</i> (DD 992)	U.S.S. <i>Fort Fisher</i> (LSD 40)
U.S.S. <i>Bristol County</i> (LST 1198)	U.S.S. <i>Finback</i> (SSN 670)
U.S.S. <i>Minneapolis/Saint Paul</i> (SSN 708)	U.S.S. <i>Hyman G Rickover</i> (SSN 709)
U.S.S. <i>Camden</i> (AOE 2)	U.S.S. <i>Wichita</i> (AOR 1)
U.S.S. <i>Frank Cable</i> (AS 40)	U.S.S. <i>Edenton</i> (ATS 1)

Mr. BATEMAN. I will yield to Mr. Foglietta.

Mr. FOGLIETTA. Just for one short question. This is not specifically on Desert Shield or Desert Storm, but when is the rescission list that we are expecting to be released?

Mr. O'KEEFE. We submitted the recision package to the Office of Management and Budget about 3½ weeks ago, and I am advised that it was due to be released today. Then again, I have heard that a few times.

Mr. FOGLIETTA. Can we expect it at least by tomorrow?

Mr. O'KEEFE. That is my understanding, but I have put in a call again this morning, encouraging the Office of Management and Budget to submit it today.

Mr. FOGLIETTA. Thank you, sir.

Mr. O'KEEFE. Sir?

Mr. SISISKY. Mr. O'Keefe, are you an accountant?

Mr. O'KEEFE. I'm sorry, sir?

Mr. SISISKY. Are you an accountant?

Mr. O'KEEFE. Sometimes I feel like one.

Mr. SISISKY. But as an analyst, you understand. I just noticed the way you grinned when Mr. Dickinson and Mr. Aspin asked you a question.

If you were an accountant or an analyst for a Board of Directors, would you be comfortable with this notional type of expense versus the reprogramming?

I mean, be honest now.

Mr. O'KEEFE. Quite frankly, sir, as a pure accounting method, the best approach would be to wait until the costs are all in, come back up here, and account at the end of the day.

Unfortunately, we do not have the luxury to do that. We are running out at this stage. We have gone to the point where we have invoked the Food and Forage Act, a Civil War statute of

origin, in order to make the very limited kinds of expenses be met in this period. We are quickly going to be confronting the stage where, at least for the Army and the Marine Corps, that if the cashflow does not keep up, we will be able to continue under Food and Forage to pay for the eligible kind of activities under that Act.

But for things like civilian payroll, we will have to stop paying folks.

Mr. SISISKY. I understand that.

Mr. O'KEEFE. So unfortunately we are not looking at the same kind of accounting practices, principles, that are devised by business methods as normal.

Mr. SISISKY. But can you solve the problem through reprogramming? If we assured you of a fast turnaround here.

Mr. O'KEEFE. It would be a gigantic mandate. In the interim, the approach that we are looking at here by this recommendation is to release the foreign contributions that have been received, as well as those that are pledged, because that is what the foreign contributors put it ahead for. The Congress, in its wisdom, I think, established the account, and they—

Mr. SISISKY. That is another question that I want to talk about, is the pledges. Is there a date certain on these pledges?

Mr. O'KEEFE. Yes, sir. By March 31st, is the conditions upon which those commitments were made. Each of the foreign governments offered as how those commitments would be honored.

Mr. SISISKY. March 31st, they have to be honored. Now are there other countries other than Japan that have to have legislative OKs on that?

Mr. ROWEN. I imagine there are. I am just trying to think of one I am aware of. I am not sure I could give you another example of another country, but there might be.

Mr. SISISKY. I mean, from what I read, there seems to be a little problem.

Mr. ROWEN. From where?

Mr. SISISKY. In Japan.

Mr. ROWEN. Not really. No, I think it is a pretty good level of agreement. I am told there are no other countries that require any legislative action, and I think the prospect in Japan is quite good.

Mr. SISISKY. I think the supplemental request accelerated development. That is the feeling of additional new capabilities to offset, I think, quote, superior numbers of Iraqi forces.

Has that rationale become invalid now?

Mr. O'KEEFE. I'm sorry, sir. On the surge production rates, you mean?

Mr. SISISKY. Right.

Mr. O'KEEFE. Some of it—let me—

Mr. SISISKY. Actually it is development rates. Would that be the manufacturing? I picked that word out.

Mr. O'KEEFE. As in research and development?

Mr. SISISKY. Yes.

Mr. O'KEEFE. There is a very limited amount of R&D in the request here, and my memory fails me right now on exactly what it is, but my recollection is, it is less than \$10 million. To the extent that does not meet with the requirements—

Mr. SISISKY. How about the accelerated production?

Mr. O'KEEFE. Then we would not proceed with it. I mean, in light of the circumstances, that is something we would not do.

Mr. SISISKY. Has anybody talked about, since you have \$10.7 billion in military personnel, obviously a lot of that charge is to Guard and Reserve. Have we talked about getting them out fast or faster or what?

Mr. O'KEEFE. Of the \$10.7 billion, \$8.5 billion of it is—

Mr. SISISKY. How much?

Mr. O'KEEFE. \$8.5 billion is associated with the activation of Guard and Reserve personnel to put them on the full-time rolls as opposed to the weekend, 1 weekend a month cost. It is a net number from the Guard and Reserve accounts of about \$600 million which we would have otherwise paid for the weekend activity, has been proposed as another section of the supplemental to transfer that money to the active military accounts.

Now conceivably if this particular effort—and I am a little fuzzy on this—there is a recent change in the law that permits up to x number of days for call-up. You can suspend it at some given period beyond 180 days. To the extent that the Secretary determines that at the end of this effort, it is prudent to release the Reserve component from active service expeditiously, that is certainly something he would take a look at, but the numbers we have provided is a notional number through the fiscal year of what it could cost if we kept them on the rolls for that long.

Mr. SISISKY. So that is a way to save money?

Mr. O'KEEFE. Oh, yes, sir. It could diminish the number dramatically.

Mr. SISISKY. Thank you.

Mr. SPRATT [PRESIDING]. Mr. Lancaster.

Mr. LANCASTER. Thank you, Mr. Chairman, and thank you, gentlemen, for your testimony today.

One of the concerns have had and have asked each of the service Secretaries as they have testified in recent days is the impact of Operation Desert Storm on morale, welfare, and recreation programs.

I see on page 32 of your prepared remarks that you have included a figure for each of the services for morale, welfare, and recreation in theater and for R&R opportunities.

First of all, I wonder what, if anything, we are doing about the loss of MWR funds, which would normally come into our facilities in CONUS which we have lost because of the loss of customer base? Will those funds be replaced as a part of the supplemental or in some other way? Are we looking at other ways of funding that loss, either through support from our allies or otherwise?

Then another thing that relates to your testimony on page 32, you do provide there for R&R opportunities for forces who remain in theater for up to 365 days.

Are we, in fact, in the supplemental preparing for an extended presence in the region of our forces that would call for this R&R opportunity, and does this go beyond the March 31st quarter funding that I thought the supplemental covered for the whole year, or are these R&R opportunities to be used between now and the end of March?

Last, if R&R opportunities are to be afforded to our forces in the region, I hope you will look very closely at the superb armed forces recreation centers that we have that are now drastically underused in Germany as a very fine way to provide R&R for our forces at a cost much less than the luxury liners that we have used before the fighting began.

Mr. O'KEEFE. Thank you, Mr. Lancaster. On your first point, that is an excellent notion. I have to explore that to determine exactly what the impact has been on Stateside MWR activities and the lost revenues they have. That is a point that really has not come across my screen at all, and it is one I want to go back and take a look at.

On the issue of looking at recreation centers that exist, clearly we prefer to do that, and to the extent that we can utilize the recreation centers that are out there, we were pretty much forced, as you can appreciate, given the intensity of what was going on in the late fall and early winter of not finding a whole lot that was in the neighborhood in the Persian Gulf.

Certainly the Saudi Arabians made available a number of different opportunities for recreation, but there really was not that much in the area, and we did attempt, to the extent we could, to transport people out of theater, but that got to be very expensive and also very time-consuming in terms of the number of folks required to maintain the force and presence there.

But we will take a look at that issue. That is an excellent point.

As far as the R&R itself, for the full year, again this is a notional cost of what it would be if we had deployed this many people in theater for that number of days. Clearly, we would not expend this much, if an orderly withdrawal begins soon. To the extent that happens, we would only cover the expenses we have incurred to date and any that would be incurred during the drawdown period, and, no, we would not continue to spend up to this amount. We would cover only the incremental cost of what is actually there.

But this is a notional expense of what it would run, if you were to maintain that force structure through until September 30, and it makes no suggestion or intent on that point. If we can get out of there soon, that is clearly what everybody is intending to do, to reach a very expeditious conclusion on this, and if that happens and Hussein decides that this is the end of it, we will begin moving out as quickly as we can.

Mr. LANCASTER. On page 106, you provide for restocking the POMCUS sites and the war readiness spare kit stocks. I am assuming that these are the stocks that have been exhausted and the equipment that has been removed from the POMCUS sites in Europe.

Is it your intention to replace the equipment in those POMCUS sites and the spare stocks at the level at which they were stocked before this operation, and do you intend perhaps to establish POMCUS sites and inventories of spare stocks in the Middle East to take care of future contingencies in that region, and is that a part of what we are talking about on page 106?

Mr. O'KEEFE. I would like to defer to Secretary Rowen on the question of what our longer-term intentions would be on prepositioning. But clearly, as far as the use of POMCUS material and

war reserve material in this effort, it would be our intention to replenish the war reserve inventory under any circumstances, because that is a fixed set of assets that are packages dependent upon deployment schemes of how big a force you are going to move. So, yes, we would look to replace that.

As far as POMCUS is concerned, it really depends. That is something the Secretary has indicated he really wants to look at in terms of where the forces are redeployed to, once we pull out of the region, whether they go back directly to where they came from or the U.S., depending on the circumstances. That may not be in the cards. We are not really sure yet. That is something that has to be sorted through.

But in terms of the longer-term prepositioning effort, I would like to defer to Secretary Rowen.

Mr. ROWEN. On that subject, there has been consideration given to having more equipment there, in fact to leaving some of our equipment behind. Really no firm decisions. Again, it depends on what the situation looks like at the end of this phase.

Mr. LANCASTER. But I guess my question is, on page 106, are these funds which are requested for the purpose of establishing POMCUS sites and spare inventories in the Middle East or doing—putting back to the level at which they were stocked before the operation in Europe, POMCUS sites and spares?

Mr. O'KEEFE. Yes, sir. It is primarily the redeployment cost, transportation expenses to move principally people and second assets back to the United States, Europe, from wherever it was that it was deployed, depending on how the Secretary determines the force structure ought to look at the end of all this.

But there is no intention necessarily from within these costs of replacing one-for-one the assets derived from the specific POMCUS sets that exist in Europe at this time. That is something we have to take a look at.

The \$5.2 billion is an estimate of what it would take for us to do an orderly transportation withdrawal of people and things, regardless of destination.

Mr. LANCASTER. One concluding question, if I may. I had to leave the committee, and I think when I came back in, you may have been answering this question. If you have already answered it, forgive me.

But the level of POWs which were taken apparently is significantly greater than anyone ever anticipated. I know that you put this together before those POWs were taken.

Do we have adequate funds here to accommodate the expenses of this extraordinary number of prisoners, or will we need further assistance, either from our allies or by amendment to this request before it is acted on?

Mr. ROWEN. All of this is happening as we speak, and so it is very hard to provide you with anything like a cost estimate.

My guess is that this will not be a big item. There are certainly a lot of people who have to be fed, taken care of, and I think that provisions that exist by way of host nation support, for example, for feeding and caring for people should really do the job.

Mr. O'KEEFE. Mr. Lancaster, we have also built into the combat expenses these notional numbers of daily cost, a factor for what we think prisoner support would be.

Now as you suggest, I do not think anybody anticipated in the early going here of the ground phase of this activity would be incurring anything like this. So there is an awful lot of work rounds going on, and I could not tell you exactly who is picking up the price tag on that, be it the Saudis or, as Mrs. Byron suggested, the meals ready to eat which we have in theater. I do not know which one of those categories this is falling into right now.

Mr. LANCASTER. Thank you.

Mr. O'KEEFE. Thank you, sir.

Mr. SPRATT. Mr. Kasich.

Mr. KASICH. Good to see you again, Sean. You are really making the rounds up here.

The question that I have for you is: What do we do if your estimates are wrong, OK, and you guys have all this money left over?

Is there a way that it comes back? We cannot find \$300 million to fix the B-1, OK, so maybe we create a new M account. We can call it some other account. But what do we do when we do not need as many MREs as you think we are going to eat. We are not going to replace as many Patriots as you estimate we may replace. So what happens if we have that extra money?

Mr. O'KEEFE. It is always a pleasure to see you, Mr. Kasich.

[Laughter.]

Mr. O'KEEFE. To the extent that I am wrong, we would be delighted to come back here and suggest, as we have set up in this formula, that the \$15 billion in the working capital fund, or any amount that may be contained at the end of the day, once we settle all our costs, the bills have been rendered, and GAO has come in and absolutely scoured all the books, to the extent that there is anything left here, by all means, the disposal of those funds is purely a question of what Congress believes is appropriate.

In the interim, there is one thing I know about cost estimating on this effort, and that is, every time we have taken a shot at it, we have been wrong. So what we have tried to devise here is a package that recognizes that this is almost an impossible task.

We know we can estimate the baseline expenses. We have a pretty good feel for that. We know what it costs to support 500,000 people in theater. We know we have redeployment expenses. We know we have transportation costs to bring the folks home. We know we have incurred costs between October and December. All those are quantifiable. We know to a lesser extent that there are some things we ought to be thinking about moving on with to replace the inventories.

There are cases where we have gone ahead and accelerated the delivery of assets in order to affect or prosecute the war effort. Now we need to have some kind of a transitional period in the contracts.

When you get done with all those costs, those are the only ones we know. The combat expenses beyond that beats me. To the extent there is anything left, this mechanism leaves it for Congress to determine exactly what the disposition of those funds will be. That is my fondest hope.

To the extent that it does not happen, this at least provides the funds necessary beyond the foreign contributions to make all these costs be disposed of as expeditiously as we can.

Mr. KASICH. I take it, we are taking the most conservative numbers when we are talking about those particular elements that are perhaps fluctuation cost?

Mr. O'KEEFE. I believe so, yes, sir.

Mr. KASICH. OK, thank you.

Mr. SPRATT. Mr. Bilbray.

Mr. BILBRAY. Yes, Mr. Chairman, thank you.

I have several questions. It probably falls in line with Mr. Kasich's question, because, for instance, I notice on page 6 of your prepared testimony that you say currently there are 200,000 reservists called up, but by the end of April, you expect that there will be another 146,000 more called up.

Knowing what we know today, do you really anticipate calling up another 146,000 reservists and moving them across the country or across the world and then having to move them back? Is this still in the planning stage, to call up this many more?

Mr. O'KEEFE. Oh, absolutely, sir. There is no question. The authority is still in the planning stages. There is no question that the Secretary now has the opportunity to call-up up to 360,000.

Mr. BILBRAY. I understand that, and it says you anticipate calling them up by April. Is that still the anticipation?

Mr. O'KEEFE. At this stage in the game, if the effort continues as successfully as it has been, I am sure that the Secretary would think very long and hard about the need to do this.

Mr. BILBRAY. Again, these figures are then programmed into these figures you are asking for right now; is that correct?

Mr. O'KEEFE. It is for the period of October through March. We know we have called up 206,000 folks by the 10th of February, for example, and of that amount, we have factored in the cost for those folks through that period.

Beyond that, we have built in a factor for the higher call-up rate. Now to the extent that we do not call them up, that is not a cost we would incur as an incremental expense here, and therefore we would not have to defray that expense.

But we know that within that \$12.3 billion estimate, for example, between January and March, there is a precise number of 206,000 reservists who have been called up, not the 360,000.

Mr. BILBRAY. Well, the budget figure you have is the 206.

Mr. O'KEEFE. Yes, sir.

Mr. BILBRAY. Not the 360, OK.

Mr. O'KEEFE. It is a notional number of what it would cost.

Mr. BILBRAY. My second question is, a little thing that bothered me in your prepared testimony, you mentioned that \$14.3 billion has been allocated—this is not out of the supplemental, but out of the overall cost here, the money that has been provided by the allies—additional support for Egypt, Turkey, and Jordan.

I think what bothers me is the Jordan section of that section. What kind of money are we allocating in this overall program for Jordan?

Mr. ROWEN. In terms of our money?

Mr. BILBRAY. Well, not only our money, but this whole commitment.

Mr. ROWEN. Oh, OK. But we are not talking about our money.

Mr. BILBRAY. Well, this money is coming into us; is that correct?

Mr. ROWEN. No. No, sir, not at all.

Mr. BILBRAY. No American dollars are going to Jordan right now?

Mr. ROWEN. Not as part of this effort. Now we have had—we have a security assistance program with Jordan.

Mr. BILBRAY. What are we paying right now? What are we giving to Jordan?

Mr. ROWEN. The amount for Jordan, was \$20 million for fiscal year 1991.

Mr. BILBRAY. Why don't we put a little amendment in here that said that as part of this supplemental that no more money can be given to Jordan?

Mr. ROWEN. I am talking about our regular security assistance.

Mr. BILBRAY. I understand what you are saying.

Mr. ROWEN. By the way, we have put a suspense on shipments of supplies to Jordan. That is in suspension now. But it has nothing to do with the supplemental.

Mr. BILBRAY. All right. I understand. I just cannot see us giving one more dollar to Jordan under the circumstances from any fund anywhere.

Mr. O'KEEFE. If I could, sir, I am sorry, the reference in the statement was that the foreign contributors have separately, through the Gulf Cooperative Council or whatever, have provided funds to go to front-line states, among which—

Mr. BILBRAY. All right. But it did not come to our cashflow. We did not reimburse them. It came directly.

Mr. O'KEEFE. Absolutely not.

Mr. BILBRAY. I hope that some of our contributors could be encouraged to stop sending any money to Jordan until King Hussein starts changing his rhetoric a little bit.

The other one was, on page 34 of the supplemental budget, it mentions the spare parts, \$44 million for condemned parts. In the Readiness Committee, we have had hearings on defective parts that have been provided to the military. Some of it went into the Apache, some in the M-1A.

Is this money for parts that have actually worn out from the continual desert usage, because they have worn out and they are condemned, or is this defective parts that have been discovered while in the process of Operation Desert Storm?

Mr. O'KEEFE. The former. What is going on here is, due to the increased operating rates, what we are doing is, within the stock fund, we are issuing depot level repairable spare parts directly to the front-line units, and without bothering with the accounting question of exactly how it is going to be recovered, it is centrally funded. We are going to move to a system whereby that particular unit will, in turn, have to reimburse part of the cost to repair the asset.

In cases like this where there is a usage rate that is inordinately high and therefore is a condemned asset that has been—it has been used up, we move that out of the inventory and do not charge that

directly back to the operating cost of the unit. That is recoverable here as part of the stock fund loss.

Mr. BILBRAY. Have you, in the process of preparing any of these documents, come across any reports that talk about defective parts in the ability of our military to perform well?

Mr. O'KEEFE. Not to my knowledge, sir, but that does not suggest that there is not something out there. With an operation this big, you have got to bet that there is something that just has not worked right, but I am not aware of it.

Mr. BILBRAY. When we had our testimony for readiness, it showed that almost one-fifth of all of the fasteners that had been supplied to the military over the last 4 to 5 years did not meet the standards that the military had set out for those parts, all the way from the main bolt that held the propeller on the Apaches all the way down to the things that held the major parts in the M-1A tank. That is why if anything comes up like that and it is important.

My last statement is when this is all over, because this budget is so speculative, I mean you are giving us a budget, you are really reaching up into the clouds to come up with figures based on estimates, and guesstimates, and so forth, will we get a detailed breakdown completely of where the money was spent in this supplemental budget line by line?

Mr. O'KEEFE. Yes, sir, absolutely. The bill that passed in the House I believe late last week, the Schumer-Panetta bill, that requires a cost accounting reporting system within something like 45 days after an expenditure, the administration has agreed to. We intend to provide the reports as required. We clearly would do that with or without the legislation.

As far as the quality of the estimate, I guess my only defense that I could offer is that we present a budget, for example on February 4th for fiscal year 1992, that is every bit as much of an estimate as this is. As a matter of fact, this may be closer, because we are right on top of the event as opposed to projecting what costs may be as much as a year from now.

So my confidence level in these numbers while it is very, very murky, because of the intensity of the war effort, we have attempted to capture in the estimates that we can tell you about, the numbers I have more confidence in than some of the others we look at regularly. Because they are by their very nature estimates.

So by and large, absolutely, we will provide a full cost accounting. The legislation is in place, and we would comply with that with or without passage.

Mr. SPRATT. Mr. Taylor.

Mr. TAYLOR. Thank you, sir.

Mr. O'Keefe, I am curious about something that you have on page 70 of the backup material that came with the supplemental. It is the fifth item from the top, which is the artillery projectile, 155mm M-483 projectile, where you are showing \$77.5 million, and 170,000 I presume rounds.

The thing that troubles me, Mr. O'Keefe, is that at this very moment the Army is spending \$45 million to lay away the equipment at that plant which has ceased production as of I believe last June.

For the sake of those 1,300 people who were working at that plant who have been desperately hoping to get their jobs back, what do we tell these people?

Are you going to reopen the plant to make 170,000 rounds? There has only been one plant that has been built to make these rounds. Or is it one of these things that you are going to say well, we have used them but we are not going to replace them. What do I tell those 1,300 people?

Mr. O'KEEFE. My understanding, Congressman, is that the Louisiana Army ammo plant and the Kansas Army ammo plant are capable of making parts that go into this. I am not expert in understanding how all of these pieces pull together, so let me get you something better for the record.

[The following information was received for the record:]

155MM M-483 PRODUCTION

In addition to the Mississippi Army Ammunition Plant (AAP) the following facilities can produce the 155mm M-483 Projectile:

Load, assemble and pack operations—Kansas AAP, Milan AAP and Lone Star AAP.

Projectile metal parts manufacture—Louisiana AAP; Chamberlain, New Bedford, MA; and NI Industries, Vernon, CA.

M42/M46 Grenade—Heckethorn, Dyersburg, TN; Amron, Waukesha, WI; EMCO, Gadsden, AL; Kisco, St. Louis, MO and Riverbank AAP.

But I understand that those two plants are involved in either the metal parts or some other aspect of this particular round. Now more importantly, to the extent that we do not consume this volume of the 483 round, we certainly would not proceed ahead and buy this.

Mr. HOPKINS. Say that again, please.

Mr. O'KEEFE. We would not proceed ahead and buy this, unless we consumed an inordinate volume of this round. Again these estimates were prepared at a time when we were looking at how long the ground effort would go on, and how long the artillery effort would be required. As it appears now, who knows, this may not be required.

So the probability of this happening is less certain than it was a week ago. But as far as where this is done, I am told that those other two plants, Louisiana and Kansas AAP, fabricate the metal parts or pieces that go into this particular round for completion or whatever it is. But I will get you a better answer to that for the record. There is no intent to rerun a link or reactivate anywhere.

Mr. TAYLOR. OK. The second question, and I hope that you can at some point give me an answer to this. I doubt that you will know it right off the bat. But in December, we had been told on a base tour over in Germany that the Germans were going to take the steps to amend their constitution to allow them to participate not only in NATO wars but in U.N. sanctioned wars. They are talking about participate with actual front line troops.

What has become of this effort, and who made the decision to say well, we will settle just for an economic contribution?

Mr. ROWEN. Well, basically, this is a German political process you are talking about here. The debate goes on in Germany is the short answer to that I think. I cannot give you a good forecast of

how that will go. It was not a matter of our saying it is fine, just send money. This was an intensely debated matter within Europe generally, of course, and specifically in Germany. The Germans did what they did.

They did not send forces. They did provide financial support. They did not send forces to the Arabian peninsula, but they did send forces to Turkey, which was quite important within the NATO framework. They provided assistance to Israel, and have done quite a number of other things.

But it was a very intensely debated issue within Germany and there still is a question about Germany's role for actions outside of the NATO area. That is the way it has been defined. I really cannot say more than that. It is still under debate.

Mr. TAYLOR. I guess in response to Congressman Bilbray's question that you are taking a wait and see approach to the reserve call-up of going to 346,000?

Mr. O'KEEFE. Yes, sir.

Mr. TAYLOR. OK.

Mr. O'KEEFE. That is really something that the Secretary will evaluate on a daily basis. To the extent that there are demands for more than 206,000 reservists on active duty, he will make that call. But he has the authority now to go up to 360,000. Depending on the circumstances, he may or may not use that authority.

Mr. TAYLOR. Thank you, sir.

Mr. O'KEEFE. Thank you, sir.

Mr. TAYLOR. Thank you, Mr. Chairman.

Mr. SPRATT. Mr. Andrews.

Mr. ANDREWS. Thank you, Mr. Chairman.

Just my luck that I get to ask a question when we have to go vote. Mr. O'Keefe this will be fairly brief. Obviously, the assumptions that you are making in the supplemental are changing very dramatically almost by the hour. The assumptions that we made even a few days ago obviously are different than the ones that we make today.

As a procedural matter, would it not make more sense and what would be the disadvantages of holding off consideration of the supplemental for another week and perhaps 2 weeks when we could make much more sound assumptions about what we are facing over in the Persian Gulf?

Mr. O'KEEFE. Well, as a practical matter, Congressman, I think clearly the estimates will improve, but they are never going to get to the point of precision, whereby we are retiring actual known expenses until this is all over. Unless we are all prepared to bet on the fact that we are going to begin a withdrawal in some specific time frame, which is really unknown.

The approach that we are putting together here is not being a seer on this, but we are trying to give our best estimate of what we know are expenses. Those known expenses are the costs that we have incurred from October to December, and January to March and they are fairly fixed. Those all total nearly \$40 billion. Today we are advancing the third and fourth quarter of operating expenses of the Department of Defense within the operating appropriations to retire these costs as we go along.

So while the foreign contributions are sitting in the Treasury earning interest quite nicely, we cannot use any of that money right now to defray these costs by the terms and conditions of the statutes as enacted back in October.

So the objective here would be to try to set up a mechanism whereby we use those foreign contributions to retire these costs, and minimize the taxpayers' need to defray the financial debt involved in this and get on with it, as opposed to doing a band-aid approach on a daily basis, which we are forced to do right now. It is a work-around effort. So we would appreciate expeditious consideration, sir.

Mr. ANDREWS. If you could elaborate a little bit on those foreign contributions from the allies.

Were there certain assumptions that were made when the allies made their commitments in terms of length of the war and cost of the war, and were those commitments based upon those assumptions; and if, of course, those assumptions change, might that mean that we will have—the Diet for example may decide to contribute actually less money than they have committed to?

Mr. ROWEN. There were no such specific assumptions being made. These were commitments made by these governments to this effort. When the United States went into this, we did not even have in mind asking for foreign contributions. We did it because it was necessary. These governments made their commitments because they felt it necessary to do it and important to do it. They are there.

Mr. ANDREWS. I understand that. But I am asking on what basis, how did they come up a certain dollar figure?

Mr. ROWEN. Oh, it varied enormously by country. It is a very complex process. It had to do with how concerned they were, to the extent that they felt that their national interests were at stake. It had something to do obviously with the size of their economies and so on. It just varied a lot, of course, by country. There is no formula for this. In any case, however it was done, they said all right, here is what we will commit to, and that was it.

Mr. ANDREWS. My last question. If we find ourselves in a situation where they in fact do not come through with their commitments and there is a shortfall, will that shortfall be made up just by the United States, or could we expect that shortfall to be made up by other allies?

Mr. O'KEEFE. Congressman, again, these commitments that have been made by sovereign nations at the highest levels of those governments. They have honored those commitments. To date, we see absolutely no reason why those commitments will not be honored. To anticipate what the fallout would be in that very unlikely circumstance is grossly premature. At this point, we absolutely do not anticipate that.

By this mechanism, we are laboring to assure that we have every incentive to make sure that the commitments are honored and honored expeditiously.

Mr. ANDREWS. Thank you.

Mr. O'KEEFE. Thank you, sir.

Mr. SPRATT. Mr. O'Keefe, I do not have time to ask you any questions. I am sorry. Maybe we can have a candid conversation off the record about this at some time.

Thank you and Mr. Rowen both for being here.

Mr. O'KEEFE. Thank you for your courtesy, Mr. Chairman. We appreciate it.

Mr. SPRATT. The committee is adjourned.

[Whereupon, at 3:35 p.m., the committee was adjourned.]

FAIRNESS OF ALL-VOLUNTEER FORCE

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, Monday, March 4, 1991.

The committee met, pursuant to call, at 1:05 p.m., in room 2118, Rayburn House Office Building, Hon. Les Aspin (chairman of the committee) presiding.

STATEMENT OF HON. LES ASPIN, A REPRESENTATIVE FROM WISCONSIN, CHAIRMAN, HOUSE ARMED SERVICES COMMITTEE

The CHAIRMAN. The meeting will come to order.

The House Armed Services Committee today begins a series of hearings to examine our national security requirements in the post-Cold War era. We will be exploring the impact of two historic events: first of all, the decline of the Eastern Bloc threat; and, second, the war in the Persian Gulf. We will explore the way in which these two events affect the way we do defense business and ask what changes do we need to make.

One of the things, of course, of the way we do business is the All-Volunteer Force. The All-Volunteer Force is an integral part of the conduct of our national security. The men and women who currently make up this force have proved themselves consummate professionals. They have performed superbly throughout Operations Desert Shield and Desert Storm. But putting troops in harm's way has again raised the question of whether poor and minority Americans have borne too much of the battle's burden.

The committee will examine three central issues. First, we will review the economic and racial composition of our current force and compare it to forces of the past and to society as a whole; second, we will explore the implications of the force profile in peacetime and in wartime—the specter of war influences whether military service is perceived as an opportunity or a risk—and, third, we will consider what, if any, changes should be made in the way we constitute our armed forces.

The committee is pleased to welcome Mr. Bob Hale, the Assistant Director for National Security at the Congressional Budget Office. Later, we will be hearing from Mr. Doug Bandow, a fellow at the Cato Institute; Dr. Edwin Dorn, a Senior Staff Member of the Brookings Institution; and Mr. Ron Walters, the Chairman of the Political Science Department at Howard University.

We will start out with Bob Hale, who will present a study done by the CBO, and then later we will have a panel of the other members, but we want to welcome Bob Hale.

Let me at this time recognize, and see if she has any comments, the gentlelady who is the chairman of the Personnel Subcommittee, Beverly Byron.

STATEMENT OF HON. BEVERLY B. BYRON, A REPRESENTATIVE FROM MARYLAND, CHAIRMAN, MILITARY PERSONNEL AND COMPENSATION SUBCOMMITTEE

Mrs. BYRON. Thank you, Mr. Chairman.

I am not going to take a great deal of time, but I just would once again reiterate what we have seen as a Nation in the last 6 months, and that is the outstanding quality of our All-Volunteer force.

We have had some comments on one reason or another why the outstanding nature is there, why people are in the reserve and Guard, why an individual in this day and age is joining the service. We, in my subcommittee, have looked at that and tried to keep on top of it over the last several years, and I think once again this hearing will certainly focus on a new concept, and that is of the reserve and the Guard and their integration on the active duty.

So I want to commend you, and where we are going in the next few years is going to be developed on what we learn in the next few months.

The CHAIRMAN. Thank you.

Bob, the floor is yours, sir.

STATEMENT OF ROBERT F. HALE, ASSISTANT DIRECTOR FOR NATIONAL SECURITY, CONGRESSIONAL BUDGET OFFICE, ACCOMPANIED BY RICHARD L. FERNANDEZ, NATIONAL SECURITY DIVISION, CBO

Mr. HALE. Thank you.

I have a prepared statement to submit for the record.

The CHAIRMAN. Without objection, all prepared statements will be put into the record.

Mr. HALE. I have with me Richard Fernandez, who prepared our study.

The deployment of troops to the Persian Gulf renewed interest in the question, as you said, Mr. Chairman, of whether the All-Volunteer Force (AVF) fully represents American society. With the outbreak of hostilities, the question has taken a new form: who among America's youth fought in the Persian Gulf war?

Public and media discussions of this issue sometimes appear to be fueled more by anecdotes and impressions than by facts. I welcome the opportunity this afternoon, Mr. Chairman, to present a few facts.

Conclusions about social representation in the All-Volunteer Force vary, depending on whether one is considering socioeconomic or racial characteristics. Let me turn first to socioeconomic characteristics.

Two recent studies conclude that today's enlisted recruits are broadly similar to the general youth population in terms of their socioeconomic backgrounds. One of those studies was completed by the Congressional Budget Office in 1989. CBO examined family incomes in the home neighborhoods of military recruits. CBO did not

have data on the incomes of the families of the recruits themselves, but we do know where the recruits come from by ZIP code and the average family incomes in those ZIP codes. CBO combined that data to approximate family incomes in the home areas of military recruits.

Our study found that about 45 percent of those entering active duty as enlisted personnel came from areas with above-average family incomes—in other words, in the top 50 percent of the income distribution. You can see those results on the top line of the board that is over here to my left. That top line also indicates that results for the Army were about the same as those for the Department of Defense as a whole.

But what about recruits in relatively high-income areas and low-income areas? CBO found that a recruit from a community with family incomes 20 percent below the average was only slightly more likely to enlist than a recruit from a community with family incomes 20 percent above the average. Only at the very upper end of the income scale was a substantial difference apparent. The 10 percent of American youth living in the country's richest communities were about half as likely to enlist in the military as the 10 percent from the poorest communities. You can see that last result on the second and third lines of my board.

DOD also recently completed a study that examined the socioeconomic characteristics of recruits. Even though it used a very different approach, DOD's study corroborates CBO's analysis of incomes. DOD's analysis was based on a survey of recruits that asked about such issues as the education and occupation of their parents. The survey found, for example, that the parents of recruits in 1989 had virtually the same college attendance rates, although somewhat lower graduation rates, as the parents of all enlistment-age youth. The parents of recruits were underrepresented in managerial and professional occupations and overrepresented in some service jobs, but the differences in other occupations were small.

When we turn from these socioeconomic characteristics of military recruits to their racial composition, CBO found that recruits mirror the racial mix of the youth population much less accurately than they do the socioeconomic mix. Racial minority groups continue to be overrepresented among recent recruits, as has been true through most of the history of the All-Volunteer Force.

If you look at the fourth line down on my board, you can see that blacks accounted for roughly 22 percent of active-duty enlisted recruits in 1989, compared with about 14 percent of enlistment-age youth. For the Army, blacks accounted for 26 percent of all recruits.

The differences between recruits and their civilian counterparts, in racial mix as well as in socioeconomic backgrounds, tend to be accentuated as enlistees make their initial reenlistment decisions and become part of the career force. Blacks are more likely to reenlist than whites, and people who lived in poorer communities when they entered the military are more likely to reenlist than those who entered from higher-income areas. Hence, the enlisted career forces in the military are somewhat less representative of the U.S. population than are entering recruits.

So far I have talked only about enlisted forces. Including officers, who account for about one out of every seven persons on active duty, would tend to yield a closer match between the characteristics of military personnel and those of their civilian counterparts.

In 1989, only about 7 percent of active-duty officers were black, which would partially offset the overrepresentation of blacks in the enlisted forces. The socioeconomic backgrounds of officers have not received much study because of a lack of data. But it is reasonable to expect that officers, because of their education, would tend to come from higher-income families than would enlisted recruits, thus making the total military somewhat more representative in socioeconomic terms than the enlisted force alone.

I have told you that, in socioeconomic terms, military recruits today broadly represent the youth population. Why then are there still suggestions that the United States has, if you will, an army of the poor? I think for the answer you have to look back to 1980.

In 1980, almost half of all Army recruits were high school dropouts, and more than half scored in the lowest acceptable category on the military aptitude test. As might be expected, those recruits who were dropouts and had low test scores tended to come from lower-income areas. As a result, if you look at the right-most column on my board over there, the one labeled "Army 1980," you will see that only 38 percent of Army recruits in 1980 came from areas with above-average incomes; better than 15 percent of Army recruits in 1980 came from among the 10 percent of enlistment-age youth living in the poorest communities in the country.

The sharp turnaround in Army recruiting during the 1980s is evident if you compare the results for the Army in 1980—again, that right-most column—with the one next to it for the Army in 1989. As you can see, by 1989 the Army was attracting significantly more recruits from higher-income areas and fewer from the lowest-income areas.

Recruiting improvements during the 1980s were the result of a number of factors well known to this committee—large pay raises given to the military in 1980 and 1981, the introduction of the Army College Fund and the Montgomery GI Bill, and the bleak civilian employment picture in the early 1980s.

The turnaround began, however, even before these economic incentives were in place. The Army realized that its own recruiting practices were partly to blame for the poor quality of the recruits it had been getting. New policies instituted by the Army recruiting command in the early 1980s emphasizing test scores and education rather than simply number of recruits, proved remarkably successful. Indeed, these improvements in recruiting are one of the great success stories of the military in the 1980s. Unfortunately, I don't think they got enough credit for their success. It should have put an end to the perception that the United States has an army of the poor.

The All-Volunteer Force is not fully representative of society, particularly in racial terms, and that is, of course, of particular concern during a war. But during a major war, this country would call up reserves, as we have just done in Operation Desert Storm.

How would a reserve call-up affect social composition? The call-up of the selected reserves has a mixed and rather modest effect on

the social composition of the enlisted forces. The Army National Guard, which includes almost all of the ground combat troops in the Army reserves, has a somewhat higher percentage of whites than does the active Army, but it draws more heavily from poor, rural areas of the country. The Army Reserve, comprising primarily support units, matches the active Army fairly closely in both racial and socioeconomic terms. Enlisted forces in the other reserve components are too few in number for their mobilization to have any significant impact.

Peacetime conscription is another policy that is sometimes discussed in connection with the social composition of the military. Imposing that policy would have a more far-reaching effect than calling up reserves. CBO's analysis suggests that a military that relied partially on a draft in peacetime would match the general population more closely, though not perfectly, in socioeconomic and racial terms.

Assume, for example, that a future draft was by lottery and applied to all those legally qualified for service. Assume also that drastic measures, including large pay cuts, were introduced to discourage volunteering. Under those policies, the percentage of Army recruits coming from areas in the top half of the income distribution might rise to 48 percent, up from 44 percent. A draft would also render the military more representative, though not fully, in racial terms.

The actual experience under the Vietnam-era draft offers only limited lessons about the possible effects of a draft on today's military. In the mid-1960s, the percentage of blacks among all recruits—draftees and volunteers—matched their share of enlistment-age youth rather closely. This match might seem to suggest that a draft patterned after the one in effect in the 1960s would restore a representative racial mix to the military. Such a conclusion is unwarranted. Well before the introduction of the All-Volunteer Force, the percentage of blacks in the military had begun to rise. Thus, even had the 1960's style draft been maintained, blacks would probably have been overrepresented in the military services.

Whether the war in the Persian Gulf will have any long-term effect on the social composition of the military is difficult to predict. If the war convinced many young people that service in the active duty military is no longer an attractive option—which I find very unlikely at this point—then the Army could once again face severe recruiting problems. In that case, reinstituting conscription would be more probable and could also have a more substantial effect on the social composition of recruits than it would today.

In contrast to a draft, which seems unlikely, the planned reduction in the number of U.S. forces seems much more likely and so is a more important policy to consider in connection with future social representation. That drawdown will substantially reduce recruiting requirements. Depending on how it is accommodated, this reduction in recruiting requirements could significantly alter the social composition of the military, particularly its racial composition. However, there are indications that any such changes will be modest.

In summary, the American military today is not a perfect cross-section of society, particularly in racial terms, but neither is it an

army of the poor. To the extent that view was ever correct, it is now roughly 10 years out of date. Recruits today come from high-income areas as well as low-income areas. They are the sons and daughters of college graduates as well as high school dropouts.

A volunteer military will naturally tend to attract more youth who are disadvantaged than it will the children of the wealthy. Nonetheless, broadly representative seems a fair characterization of the socioeconomic composition of today's volunteer military, if not of its racial composition.

That concludes my oral statement, Mr. Chairman. Mr. Fernandez and I would be glad to answer any questions.

PREPARED STATEMENT OF ROBERT F. HALE

The deployment of troops to Saudi Arabia and the Persian Gulf renewed interest in the question of whether the All-Volunteer Force (AVF) fully represents American society. With the outbreak of hostilities, the question has taken a new form: who among America's youth are fighting in the Persian Gulf war? Public and media discussions of the issue, which appear to be fueled more by anecdotes and impressions than by facts, indicate that perceptions of the composition of the volunteer military have not caught up with reality. I welcome the opportunity today, Mr. Chairman, to present a few facts.

SOCIAL REPRESENTATION AMONG TODAY'S PERSONNEL

Conclusions about the representativeness of the All-Volunteer Force vary depending on whether one is considering socioeconomic or racial characteristics.

Socioeconomic Backgrounds of Enlisted Recruits

Two recent studies conclude that today's enlisted recruits (and most likely the troops in the Middle East) are at least broadly similar to the general youth

population in terms of their socioeconomic backgrounds. The Congressional Budget Office (CBO) completed a study in 1989 that examined family incomes and other characteristics of the home neighborhoods of recruits. In addition, last year the Department of Defense (DoD) analyzed the socioeconomic status of the families of new recruits in its annual report to the Congress. Its analysis was based on a survey of recruits that asked about such issues as the education and occupation of their parents. Previous DoD reports examined only those personal characteristics of enlistees that are routinely recorded in military personnel records, including race, sex, education, and test scores.

In 1987, the latest year available for the CBO study, about 45 percent of those entering active duty as enlisted personnel came from areas with above-average family incomes, and 55 percent from below-average areas (see the table on page 3). ("Average" is defined here as the median of the home areas of all enlistment-age youth.) A young man from a community with family incomes 20 percent below the average was only slightly more likely to enlist than one from an area with incomes 20 percent above average. Only at the very upper end of the income scale was a substantial difference apparent: the 10 percent of American youth living in the country's richest communities were about half as likely to enlist in the military as the 10 percent of youth from the poorest communities. Statistics for the Army, the

service likely to sustain the greatest casualties in the Persian Gulf conflict, closely matched those for all services combined.

CBO's analysis of family incomes cannot be considered definitive. Data are not available for the family incomes of individual recruits. The

**ENLISTED RECRUITS IN 1989 AND 1980 COMPARED WITH
ENLISTMENT-AGE YOUTH (In percent)**

Characteristic	Enlistment- Age Youth	Enlisted Recruits		
		DoD 1989	Army 1989	Army 1980
Home-Area Family Incomes ^a				
Top half	50	45	44	38
Highest tenth	10	6	6	4
Lowest tenth	10	10	11	15
Blacks	14	22	26	30
Non-High School Graduates	26	8	10	46
AFQT Score of less than 31 ^b	31	6	7	54

SOURCE: Congressional Budget Office from Department of Defense and U.S. Census data.

- a. Recruit percentages for incomes refer to 1980 and 1987 and are for male recruits only.
 - b. AFQT is the Armed Forces Qualification Test. AFQT scores represent approximate percentiles for the general youth population.
-

results are based, instead, on average family incomes in recruits' home ZIP-code areas. This method should correctly portray the nature of differences between recruits and the general youth population, but the magnitudes of those differences may be understated.

The study by the Department of Defense corroborates CBO's analysis of income even though it uses a very different approach. For example, the DoD survey found that the parents of recruits in 1989 had virtually the same college-attendance rates (although somewhat lower graduation rates) as the parents of all enlistment-age youth. The parents of recruits were underrepresented in managerial and professional occupations, and overrepresented in precision production and some service jobs, but differences in other occupations were small.

Racial Mix of Enlisted Recruits

Military recruits mirror the racial mix of the youth population less accurately than they do the socioeconomic mix. Racial minority groups continue to be overrepresented among recent recruits, as has been true through most of the period of the volunteer military. Blacks accounted for roughly 22 percent of active-duty recruits in 1989, compared with about 14 percent of enlistment-age

youth (see the table on page 3). For the Army, blacks accounted for better than one recruit in four. Racial differences in enlistment rates were greatest for females; young black women were more than twice as likely to enlist as their white counterparts.

What will be the racial mix among U.S. casualties in the Persian Gulf war? Compared with their share of the general population, blacks may well be overrepresented among the casualties, simply because they are overrepresented in the military in general and the Army in particular. In today's Army, however, blacks are not disproportionately represented in combat occupations, as may have been the case during the early years of the Vietnam conflict. In 1989, blacks accounted for less than 27 percent of Army enlisted personnel in combat-arms specialties—infantry, armor, artillery, and combat engineers—compared with just over 31 percent of all Army enlisted personnel. Consistent with this pattern, the Army personnel (enlisted and officer) sent to the Persian Gulf include roughly the same percentage of blacks as does the Army as a whole.

Career Personnel

The differences between recruits and their civilian counterparts, in racial mix as well as in socioeconomic backgrounds, tend to be accentuated as enlistees make their initial reenlistment decisions and become part of the career force. Blacks are more likely to reenlist than whites, and people who lived in poorer communities when they entered the military are more likely to reenlist than those from higher-income areas. These results are based on CBO's examination of the career decisions of personnel who entered the military in portions of 1981 and 1982. The results are borne out, however, by overall statistics on the racial mix, which generally show a higher percentage of blacks among all active-duty personnel than among recruits.

Including Officers in the Comparison

Apart from the data on the Persian Gulf deployment, these facts deal solely with the enlisted forces. Including officers, who account for about one out of seven active-duty personnel, would tend to yield a closer match between the characteristics of military personnel and those of their civilian counterparts. Blacks accounted for only about 7 percent of active-duty officers in 1989, for example, and for about 11 percent of Army officers. Both percentages are

lower than the proportion of blacks in the general population, although higher than the proportion of blacks among college graduates. The socioeconomic backgrounds of officers have not received much study because of a lack of data. It is reasonable to expect, however, that because of their college education, officers would tend to come more from higher-income families than would enlisted recruits.

SHIFTS IN RECRUITING DURING THE 1980s

If military recruits today broadly represent the general youth population in socioeconomic terms, why is there an apparently widely-held perception that the United States has an army of the poor? For the answer, one needs to look back to the beginning of the last decade. As shown in the table on page 3, almost half of Army recruits in 1980 were high school dropouts, and more than half scored in the lowest acceptable category on the military aptitude test. That category encompasses the tenth through the thirtieth percentiles of the general youth population. As might be expected, these recruits who were dropouts and had low scores tended to come from lower-income areas. Better than 15 percent of Army recruits in 1980 came from among the 10 percent of enlistment-age youth living in the poorest communities in the

country, making these young people more than three times as likely to enlist in the Army as someone from a high-income area (top 10 percent).

If one divides enlistment-age youth in half based on the median family incomes in their home communities, the lower half accounted for 62 percent of Army recruits and the upper half for only 38 percent. Finally, nearly 30 percent of Army recruits in 1980 were black, reflecting the disproportionate reliance on recruits from disadvantaged backgrounds.

The sharp turnaround in Army recruiting is evident in the second column of the table. In 1989, only 7 percent of Army recruits scored below the 31st percentile on the military aptitude test, in the lowest acceptable test score category, and nearly 90 percent held high school diplomas. Moreover, 1989 was actually the poorest year for Army recruiting since 1985; in 1990, 2 percent of Army recruits scored in the lowest acceptable category and 95 percent held high school diplomas. Not surprisingly, these higher-scoring and better-educated recruits tended to come from higher-income areas. By 1987, the proportion of Army recruits from the poorest tenth had fallen by more than one-quarter and the proportion from the highest tenth had increased by one-half.

Recruiting improvements were the result of a number of factors, including the large pay raises given to the military in 1980 and 1981, the introduction of the Army College Fund and the Montgomery GI Bill, and a bleak civilian employment picture in the early 1980s. The turnaround began, however, even before the new economic incentives were in place. The Army realized that its own recruiting practices were partly to blame for the poor quality of the recruits it had been getting. New policies instituted by the Army recruiting command, emphasizing test scores and education rather than simply numbers, proved remarkably successful.

The new recruiting policies, reflected in higher standards for enlistment, played a crucial role in determining the social composition of the Army's enlisted force in the 1980s. Improved economic incentives made high-scoring high school graduates more willing to enlist, and tightened enlistment standards ensured that they took the place of the low scorers and nongraduates who also wanted to enlist. Nowhere are the effects of these two factors more apparent than in the figures on racial mix: the higher standards disproportionately disqualified blacks (and others from economically disadvantaged backgrounds). As a result, the percentage of blacks among all Army recruits fell between 1980 and 1987, even though the willingness of blacks to enlist apparently increased even more than it did for whites.

ALTERING THE COMPOSITION OF THE MILITARY: RESERVE MOBILIZATION AND CONSCRIPTION

Two policies that have the potential to affect the social and racial composition of the active-duty military are activating reserve personnel and reinstituting a peacetime draft.

Reserve Mobilization

The recent call-up of the part-time personnel of the selected reserves will have a mixed, and rather modest, effect on the social composition of the enlisted forces. The Army National Guard, which includes almost all of the ground combat troops in the reserves, has a somewhat higher percentage of whites than does the active Army, but it also draws much more heavily from poor, rural areas of the country. The Army Reserve, comprising primarily support units, matches the active Army fairly closely in both racial and socioeconomic terms. Enlisted forces in the other reserve components are too few in number for their mobilization to have any significant impact.

Reinstituting Conscription

Even reinstituting peacetime conscription would not lead to a military that fully matched the general population in socioeconomic or racial terms. The military would require only a relatively small number of draftees in peacetime even if drastic measures were introduced to discourage volunteering. Thus, dramatic changes in the composition of the active-duty forces would be unlikely. According to CBO projections based on the period before the current crisis in the Persian Gulf, cutting recruit pay by as much as one-half would still have allowed the services to meet about 75 percent of their recruiting requirements with volunteers. The Army might have relied on the draft for about half of its recruiting requirement, assuming it sought the same mix of test scores and educational attainment among its volunteers as it has had in recent years.

If the draft were by lottery, and applied to all those legally qualified for service, the Army's mixed force of draftees and volunteers would tend to match the general youth population more closely than do current recruits, although still not perfectly. For example, the proportion of Army recruits drawn from areas with above-average family incomes might have increased to 48 percent from the 44 percent among recruits in 1987. (A small part of the increase might have been offset if potential draftees from higher-income

families chose to serve instead as officers or in the other services.) The mixed force would also more closely match the youth population in test scores and education, assuming the Army could not reject draftees who met the minimum test-score standards set by law. In other words, the Army would be taking in more people with low test scores and without high school diplomas. Also, of course, a draft would have little effect on the composition of the career forces, which would continue to be composed of volunteers. As is the case now, the career forces would tend to have higher minority percentages and, probably, more people from poorer socioeconomic backgrounds than would be true for new recruits.

The actual experience under the Vietnam-era draft offers only limited lessons about the possible effects of a draft on today's military. In the mid-1960s, the percentage of blacks among all recruits--draftees and volunteers--matched their share of enlistment-age youth rather closely. This match might seem to suggest that a draft patterned after the one in effect in the 1960s would restore a representative racial mix to the military. Such a conclusion is unwarranted. Well before the introduction of the All-Volunteer Force, the percentage of blacks had begun to rise. Richard V. L. Cooper, in his extensive study of the AVF published in 1977, concluded that the rise was the result of improving test scores among blacks and a growing disparity between the civilian economic opportunities for young blacks and young whites.

Cooper argued that eligible blacks were much more likely than whites to be inducted, apparently because whites were better able to avoid the draft through college attendance, service in the reserves, and other activities. Looking at socioeconomic backgrounds, Cooper found virtually no change in recruits as the draft was ended and the AVF begun. What little change occurred was because of the changing racial mix.

Whether the war in the Persian Gulf will have any longer-term effect on the social composition of the military is difficult to predict. If a war convinced many young people that military service is no longer an attractive option, the Army could once again face severe recruiting problems. In that case, reinstituting conscription could have a more substantial effect on the social composition of recruits than it would today. The planned drawdown in U.S. forces, however, will substantially reduce recruiting requirements. This reduction will tend to offset any effect of postwar conscription on the social representation of the military. Moreover, suggestions that a war will have any long-term effect on the ability of the services to meet even their lowered recruiting requirements are, at this point, merely speculation.

SHOULD THE SOCIAL COMPOSITION OF THE MILITARY BE A CONCERN?

Is a fully representative military an important goal? If so, at what cost to society? These questions cannot be answered with statistics, but they are key issues in the debate over the social composition of the military. I will discuss them briefly without attempting to resolve them.

Those who argue for a fully representative military most frequently claim that, under today's All-Volunteer Force, the poor in general, and some racial minorities in particular, are treated unfairly by being forced by their economic circumstances to defend a country in whose benefits they do not fully share. To the extent that this is true, it reflects an underlying problem in society, which leaves some people facing more limited economic opportunities than others. Thus, there is a flip side to concerns about the overrepresentation of some groups in the military: is it more fair to offer someone a choice between military service and a less desirable job, or to make less desirable employment the only choice? This question has no easy answer. In peacetime, the case for allowing economic forces to operate seems fairly strong. When hostilities take place, concerns about social equity may take on greater weight.

A second argument that has been made repeatedly in recent months is that America would not so readily have chosen to fight in the Persian Gulf if the children of the nation's upper and middle classes were equally at risk as the children of the poor. The data I have presented indicate that the middle class is well represented in the enlisted ranks of the military. But it is true that the sons and daughters of wealthy parents, while they may serve as officers, are not as likely as others to be found in the enlisted ranks. Whether this factor has affected the choices being made about war with Iraq, no one can say.

CONCLUSION

The American military today is not a perfect cross-section of society, particularly in racial terms, but neither is it an "army of the poor." To the extent that view was ever correct, it is now roughly 10 years out of date. Recruits today come from high-income areas as well as low-income areas; they are the sons and daughters of college graduates as well as high school dropouts. A volunteer military will naturally tend to attract more youth who are disadvantaged than it will the children of the wealthy, so long as the causes of disadvantage persist in our society. Nonetheless, "broadly representative" seems a fair characterization of the socioeconomic composition of today's voluntary military, if not of its racial composition.

The CHAIRMAN. Bob, thank you very much.

Let me ask you this. You said that there was some evidence that the children of the managerial and professional class were underrepresented in some of the service?

Mr. HALE. Yes, they were somewhat overrepresented in some of the service occupations. The DOD study reached that conclusion.

The CHAIRMAN. How much underrepresented and overrepresented? What kind of numbers are we talking about?

Mr. HALE. DOD asked entering recruits to indicate the occupation of their parents and so forth. There is a long table here. Let me see if I can pick some numbers that are helpful.

For example, in executive, administrative, and managerial occupations, 18 percent of the population's parents had this job; 12 percent of the recruits' parents did. Professional was 13 percent in the population, 8 percent among recruits. A lot of the other ones, though, are a good deal more similar. Other services were identical; clerical, administrative support, almost identical; and so on down the line.

The CHAIRMAN. So it is 18 to 12 and 13 to 8?

Mr. HALE. For those particular categories—executive, managerial, administrative, and professional. Those are for the parents of male recruits, I should add.

The CHAIRMAN. Is it that the All-Volunteer Force is slightly more blue-collar than the population as a whole but not significantly? Is that a fair statement?

Mr. HALE. I think that is probably fair. I feel bad characterizing DOD's study for them. You might want to ask them when you have them before you.

The CHAIRMAN. Let me ask you this. What did the Army do? I know the objective numbers are the things that went into effect in the 1980/1981 time frame that made the improvements. I guess I was not aware, until I read your testimony, of the extent to which the Army made some changes there in part of the recruiting, as you said. In other words, I am aware that we made some changes—increased the pay and did some things with the education and other benefits that made attracting higher quality people easier. Explain what they did in terms of the Army itself.

Mr. HALE. They did a lot of things. This was General Max Thurman who started all these. A couple of examples that stick in my mind: the Army instituted a point system for the recruiters, where you got more points (I think it may have been three) for a high school graduate recruit than for a dropout. I am not sure I have those numbers exact, but they attempted to make it more attractive for the recruiters to seek graduates. The recruiters' performance evaluations were partially dependent on how well they met their point quota.

I also think they reallocated recruiters to areas where they would tend to be more in contact with high school graduates. I think they began a process, which still continues today to some extent, of seeking access to the high schools' lists of names of graduates so that they can contact them.

It was those kinds of managerial changes. They sound technical, but I think he really did transform the Army recruiting command from a group that was focusing on meeting next month's quota for

recruits to be sent to the training command to one that was focusing on getting high school graduates to come in, maybe, 6 months from now. They also, I think, paid more attention to the delayed entry pool, realizing that you need to recruit high school graduates in the spring. They may not be able to come in until the fall, so you have got to allow some flexibility. They did a lot of things.

The CHAIRMAN. Basically, it was the combination of that, plus the other more tangible things. How much of this could have been done by itself?

Mr. HALE. If you want to go back and make us and many other forecasters be embarrassed, go back and take some of CBO's recruiting projections from the late 1970s, using the models that were around then, and forecast how many high-quality recruits we would have gotten in the late 1980s. You won't even be close.

The CHAIRMAN. Even with the pay increases?

Mr. HALE. Right. After all, we raised pay a lot, but there was some erosion of that in the later part of the 1980s, as you are well aware. No, you are not close. I don't know that I could separate it out quantitatively for you, but I think it is clear that those managerial changes had an important effect.

I'm sorry General Thurman isn't here. He would give you a more graphic presentation of that—"horse blanket" charts and so forth.

The CHAIRMAN. Tell me about other minorities besides blacks—in particular, Hispanics—and the Hispanic composition now of the All-Volunteer Force compared to the population as a whole.

Mr. HALE. CBO didn't look at that specifically. But, if I am reading this correctly, 18- to 24-year-old civilians would be 11 percent Hispanic versus 6 percent of these recruits, nonprior service recruits, and that was in 1989.

The CHAIRMAN. So it is 11 percent of the population or 6 percent—

Mr. HALE. Eleven percent of the 18- to 24-year-old civilians are Hispanic, according to this chart, and 6 percent of the nonprior service recruits in 1989 were Hispanic.

The CHAIRMAN. Can you help me understand why blacks are overrepresented and Hispanics are underrepresented in the All-Volunteer Force?

Mr. HALE. I think I can explain a fair amount of the black overrepresentation, because the military is disproportionately advantageous to them; they tend to face lower opportunities in civilian society. I am not sure that I have an analogous explanation on the Hispanics.

The CHAIRMAN. Maybe the panel will have something to add.

Mrs. BYRON. I do. I have a theory.

The CHAIRMAN. Oh, all right. What is your theory?

Mrs. BYRON. I think you are going to find throughout the country a heavy concentration of Hispanic population. I think each and every community has a recruiter who has an obligation for a number of recruits. When you look at the diversity of the black population throughout the country, you then have more spaces to be filled nationally than in those traditionally Hispanic populations.

If you think of New Mexico, Texas, Florida, Arizona—which are heavily Hispanic. But then you look at all your industrial north

areas, where the job market is difficult, and the military is a very attractive opportunity for you—a young black.

The CHAIRMAN. Let me ask one more question and then let others ask.

Are you, Bob—you, meaning CBO—tracking the issue of what happens to the people who are in the Montgomery bill and how that plays out in terms of their reenlistment or how many leave to take advantage of the education?

Mr. HALE. CBO is certainly not doing that on an ongoing basis. I think the answer is no.

The CHAIRMAN. Do you know, offhand, what are the number of people who are now enrolled in—in other words, who are having money deducted from their salaries—how many of these people are in the service?

Mr. HALE. CBO is going to have to provide that for you for the record, Mr. Chairman.

The CHAIRMAN. Do you know how that breaks out by blacks versus whites? That is what I am getting to.

Mr. HALE. No, I don't.

The CHAIRMAN. You don't know of anybody who is tracking to see when they enlist—

Mr. HALE. My guess is that the data are available somewhere.

The CHAIRMAN. What is happening when their enlistment comes up, how many are quitting the service to take advantage of the education?

Mr. HALE. Let me suggest that CBO will either try to get that for you or pose it to the DOD witness. I think one of their representatives is here and indicated that they do track that.

The CHAIRMAN. OK.

[The following information was received for the record:]

The following table shows enrollments under the Montgomery GI Bill, by service and race, for recruits who have entered military service since August, 1985, when the Montgomery Bill was first enacted. These counts of enrollments are based on a 10 percent sample of personnel records. As the data show, enrollment percentages increased in each year from 1985 through 1989. (Data for 1985 include 9 months of the fiscal year before the Montgomery Bill's effective date.) Blacks generally have slightly lower enrollment rates than other racial groups.

Most of those who have enrolled in the Montgomery Bill program are still in service, since the average term of military enlistment is about 4 years. CBO does not have data on individual reenlistments or on use of Montgomery Bill benefits by those who have completed their terms of enlistment. Thus, we cannot say with certainty how many of those enrolled in the Montgomery Bill have used their benefits after separation from service. Previous analyses of the behavior of service members eligible for educational benefits under either the old GI Bill or the Veterans Educational Assistance Program concluded that reenlistment rates among those eligible for benefits were 10 percent to 15 percent lower than among those who were not eligible.

MONTGOMERY GI BILL ENROLLMENTS, 1985-1990

	Not enrolled	Enrolled	Total	Enrollments as percentage of total
1985 COHORT				
Army:				
White.....	67,230	19,600	86,830	23
Black.....	23,380	3,810	27,190	14
Other.....	4,850	1,160	6,010	19
Navy:				
White.....	41,850	9,600	51,450	19
Black.....	7,730	2,050	9,780	21
Other.....	2,910	810	3,720	22
Air Force:				
White.....	46,610	5,820	52,430	11
Black.....	9,180	780	9,960	8
Other.....	2,150	350	2,500	14
Marines:				
White.....	21,510	4,360	25,870	17
Black.....	5,200	990	6,190	16
Other.....	1,450	470	1,920	24
Navy 2x4:				
White.....	9,670	2,760	12,430	22
Black.....	2,350	710	3,060	23
Other.....	620	280	900	31
All DOD:				
White.....	186,870	42,140	229,010	18
Black.....	47,840	8,340	56,180	15
Other.....	11,980	3,070	15,050	20
Total.....	246,690	53,550	300,240	18

1986 COHORT

Army:				
Unknown.....	0	10	10	100
White.....	25,060	65,930	90,990	72
Black.....	9,090	19,680	28,770	68
Other.....	1,700	5,410	7,110	76
Navy:				
Unknown.....	0	10	10	100
White.....	19,630	35,260	54,890	64
Black.....	4,610	7,690	12,300	63
Other.....	1,060	2,460	3,520	70
Air Force:				
Unknown.....	0	20	20	100
White.....	29,090	23,390	52,480	45
Black.....	6,110	4,160	10,270	41
Other.....	1,260	1,670	2,930	57
Marines:				
Unknown.....	0	10	10	100
White.....	11,250	14,840	26,090	57
Black.....	2,550	3,410	5,960	57
Other.....	970	1,740	2,710	64
Navy 2x4:				
Unknown.....	10	10	20	50
White.....	4,720	8,990	13,710	66
Black.....	1,200	2,220	3,420	65
Other.....	220	550	770	71
All DOD:				
Unknown.....	10	60	70	86
White.....	89,750	148,410	238,160	62
Black.....	23,560	37,160	60,720	61
Other.....	5,210	11,830	17,040	69

MONTGOMERY GI BILL ENROLLMENTS, 1985-1990—Continued

	Not enrolled	Enrolled	Total	Enrollments as percentage of total
Total	118,540	197,450	315,990	6

1987 COHORT

Army:				
Unknown.....	0	10	10	100
White.....	14,750	71,290	86,040	83
Black.....	4,530	22,830	27,360	83
Other.....	720	5,550	6,270	89
Navy:				
Unknown.....	10	10	20	50
White.....	18,290	33,030	51,320	64
Black.....	4,540	7,800	12,340	63
Other.....	720	1,850	2,570	72
Air Force:				
White.....	21,010	23,330	44,340	53
Black.....	3,830	3,560	7,390	48
Other.....	930	1,300	2,230	58
Marine:				
Unknown.....	0	10	10	100
White.....	8,920	16,670	25,590	65
Black.....	2,060	3,750	5,810	65
Other.....	670	1,740	2,410	72
Navy 2x4:				
Unknown.....	0	10	10	100
White.....	4,980	10,770	15,750	68
Black.....	1,720	2,870	4,590	63
Other.....	190	570	760	75
All DOD:				
Unknown.....	10	40	50	80
White.....	67,950	155,090	223,040	70
Black.....	16,680	40,810	57,490	71
Other.....	3,230	11,010	14,240	77
Total	87,870	206,950	294,820	70

1988 COHORT

Army:				
Unknown.....	0	40	40	100
White.....	3,510	68,200	71,710	95
Black.....	940	24,680	25,620	96
Other.....	150	5,190	5,340	97
Navy:				
Unknown.....	0	10	10	100
White.....	14,010	38,420	52,430	73
Black.....	3,880	9,320	13,200	71
Other.....	610	2,470	3,080	80
Air Force:				
Unknown.....	0	20	20	100
White.....	11,180	21,810	32,990	66
Black.....	1,900	3,830	5,730	67
Other.....	590	1,300	1,890	69
Marines:				
Unknown.....	0	10	10	100
White.....	7,530	17,710	25,240	70
Black.....	1,650	4,840	6,490	75
Other.....	410	2,230	2,640	84
Navy 2x4:				
White.....	3,150	9,500	12,650	75
Black.....	1,310	3,140	4,450	71

MONTGOMERY GI BILL ENROLLMENTS, 1985-1990—Continued

	Not enrolled	Enrolled	Total	Enrollments as percentage of total
Other	180	660	840	79
All DOD:				
Unknown	0	80	80	100
White	39,380	155,640	195,020	80
Black	9,680	45,810	55,490	83
Other	1,940	11,850	13,790	86
Total	51,00	213,380	264,380	81

1989 COHORT

Army:				
White	3,220	68,910	72,130	96
Black	990	26,580	27,570	96
Other	200	6,060	6,260	97
Navy:				
Unknown	10	20	30	67
White	10,930	43,640	54,570	80
Black	3,610	11,360	14,970	76
Other	620	3,060	3,680	83
Air Force:				
Unknown	10	10	20	50
White	10,640	24,760	35,400	70
Black	1,570	3,740	5,310	70
Other	580	1,640	2,220	74
Marines:				
Unknown	0	10	10	100
White	5,820	18,020	23,840	76
Black	1,450	4,470	5,920	76
Other	390	2,310	2,700	82
All DOD:				
Unknown	20	50	70	71
White	32,810	162,510	195,320	83
Black	8,840	49,290	58,130	85
Other	1,920	13,680	15,600	88
Total	43,590	225,530	269,120	84

1990 COHORT

Army:				
Unknown	0	10	10	100
White	2,110	53,290	55,400	96
Black	530	19,200	19,730	97
Other	100	5,070	5,170	98
Navy:				
Unknown	0	10	10	100
White	13,070	32,250	45,320	71
Black	4,030	8,340	12,370	67
Other	630	2,070	2,700	77
Air Force:				
Unknown	0	10	10	100
White	7,710	20,720	28,430	73
Black	1,350	3,030	4,380	69
Other	320	1,010	1,330	76
Marines:				
Unknown	0	10	10	100
White	5,540	18,660	24,200	77
Black	980	4,450	5,430	82
Other	390	2,260	2,650	85
Navy 2x4:				
Unknown	0	10	10	100

MONTGOMERY GI BILL ENROLLMENTS, 1985-1990—Continued

	Not enrolled	Enrolled	Total	Enrollments as percentage of total
White.....	3,310	2,850	6,160	46
Black.....	1,050	1,230	2,280	54
Other.....	170	260	430	60
All DOD:				
Unknown.....	0	50	50	100
White.....	31,740	127,770	159,510	80
Black.....	7,940	36,250	44,190	82
Other.....	1,610	10,670	12,280	87
Total.....	41,290	174,740	216,030	81

Source: Congressional Budget Office, using data supplied by Defense Manpower Data Center.

Note: "Navy 2x4" refers to Navy recruits who enlist for 2 years of active duty followed by 4 years in the selected reserve.

The CHAIRMAN. Other questions—Beverly.

Mrs. BYRON. Thank you, Mr. Chairman.

Let me touch on a few of the questions the chairman talked about, in the early 1980's, when we had a perception throughout this country that the military was not exactly the brightest place to be. We saw on a regular basis training manuals written in comic book style because many of the people in the service had difficulty comprehending a training manual.

So when the Army made a concerted effort to upgrade not only compensation, but also to put forth a professional thrust through their recruiters, I think that certainly has made a tremendous difference. I can remember sitting in this committee room with the Secretary of the Army debating the number of category 4's that they had taken in each year to meet their needs. Today, we don't even discuss category 4's.

It used to be, in the judiciary system, if there was a young man who was on the fringe of a problem, it was not at all unheard of to say he would cop a plea, go into the service, the service would straighten him out, and the community would be better off for having him serve in the military as opposed to being incarcerated.

These were all negatives. These aren't there any more.

We looked at a time when we had a draft, and, as you said, it matched more closely with the socioeconomic profile. But, at the same time, many of the people today who are in the service are in the service as a profession or a career. So now it does not meet with that same profile nationally.

I think one of the things disturbing me greatly is, as we find the return of the servicemen and women from Operations Desert Storm and Desert Shield, those who are in the Guard and reserve, what type of treatment are they going to receive when they come back into the job market? Since they have been gone, we have had a turndown and an increase in unemployment, we have many businesses in chapter 11; are those jobs going to still be there? If we find a large number of Guard and reserves who are coming back home, and find no jobs waiting for them, even though the law mandates that those jobs will be held, then I think we are going to have a very difficult time filling the Guard and reserve.

We are still under DOD guidelines to drawdown 100,000 active duty this year. Those individuals, many of whom are coming out of active duty with overseas deployment, will be coming into the job force, and whether they are able to obtain something in the job market is going to be critical.

Now let me ask about the impact of the force drawdown on women and minorities. There is no question but that the drawdown is scheduled. It is going to have to be delayed somewhat. But the immediate interest is getting the drawdown back on track. I got a call today from somebody who was just called up in a Guard and reserve unit, at which time he was quite surprised, but he reports next week.

We are going to be drawing down the volunteer force, and it is going to be painful for many service members. What is going to happen to the welfare of those two special groups—women and minorities—as we draw that down? Are we going to be looking at changing the numbers of women we currently have, which is about 11 percent? Is it going to be a greater hazard for women and minorities because of the high profile of a lot of the rhetoric in the media on women deployed, on the number of minorities, that some people feel is a civil rights issue? I don't think we have heard any more eloquent testimony than General Powell's, who put it into the proper perspective, as far as I was concerned.

Do you have any suggestions that we can look at as we try to address those issues?

Mr. HALE. I tell you that CBO has looked at the drawdown and tried to think about it in terms of its effects on social composition. Let me separate the issue of what happens to women from the minority issue.

On women, there certainly need be no change. The military could scale back its recruiting. The only thing we have that indicates initial thoughts is a manpower requirements report that suggests, at least in the Army, a very small reduction in the percentage of recruits in 1992 and 1993 who are women, compared with 1990, but it was not substantial. We don't have in that book the Air Force's plans, and they are a large recruiter of women. So CBO can't give any definite statement. But there is nothing in there to indicate major policy changes.

I think the same story applies, although it is a little more complicated, with respect to minorities. There is the possibility of substantial changes in minority representation associated with the planned drawdown, but no indication yet that that will happen.

What the drawdown is going to do is reduce recruiting requirements by as much as a third, perhaps, for the next 4 or 5 years at least. If that reduced recruiting requirement were accommodated by raising minimum educational standards and test scores required for entry into the services, it could result in sharp changes in social composition and particularly a reduction in the blacks in the military. Alternatively, the services could accommodate reduced recruiting requirements by leaving the standards the same and simply scaling back recruiting resources. I think there is some indication that they are tending toward the latter policy.

Once again, the Army's plans for 1992 and 1993 seem more consistent with a scaling back of recruiting resources, reducing budg-

ets a bit, than with others. So, based on what CBO has seen, we wouldn't expect any major change in the social representation associated with the drawdown.

Mrs. BYRON. Let me ask one quick follow-on question. We have seen the aviation industry fairly heavily involved in the reduction of forces. Many of the people we have currently serving in the military are there in an aviation role—many of the young people that have gone in to get the skills not only as pilots but also as aviation technicians, helicopter technicians, and tank mechanics, which are skills that transition into everyday life. Are we going to find a difficulty for those individuals as they come out of the service?

Mr. HALE. I think you will find that the combination of generally high-quality people in the military and the training the military gives will stand them in pretty good stead. Certainly, it will be harder to find a job now than it would have been a few years ago when the economy was expanding, but I doubt there would be across-the-board problems with people leaving the military and not finding jobs.

There is a bright side to the aviation problems, too. We spend a lot of money training the pilots. They are a lot less likely to get out, we know from historical evidence, when the aviation community is not hiring heavily. So, from the standpoint of the Department keeping down its training costs, there is a bright side there.

Mrs. BYRON. Thank you, Mr. Chairman.

The CHAIRMAN. Herb.

Mr. BATEMAN. Thank you, Mr. Chairman.

Mr. Chairman, I have no questions that I need to pose, but it does afford me an opportunity to make some comments that I think, hopefully, are particularly appropriate in the House Armed Services Committee.

It seems to me that the function of the American military is to provide for the common defense of the United States and that the acid test is whether or not the personnel who make up our armed services have, indeed, provided for the common defense and done so in a very adequate manner.

In light of our experience in Operation Desert Storm, the brilliance of the military campaign plan, and the incredible, exemplary manner in which the personnel of the armed services in all branches executed that plan, I think we can all, very appropriately, say that they have provided magnificently for the common defense.

It is the function and purpose of the Congress to raise and support armies and provide for a Navy in order to assure our common defense, and the essence of that is, are they able to enter into combat when called upon and duly authorized to do so on behalf of the national security interests of the United States?

The people in our armed services have demonstrated that their composition, their talents, their training, their ability to use the sophisticated equipment which they have been furnished have indeed been almost extraordinary. I think we need to keep that very much in mind as we go through the kinds of examinations that we are apparently going through today, and we need to at least maintain a perspective that the first and paramount consideration is the adequacy of our provisions for our national defense and whether or not the forces which serve in the military are capable of doing it.

The answer to that is a resounding yes and, therefore, somewhat suggestive that we really do not have a problem that needs to be addressed in this committee.

If you look at this in a broader context—and I don't suggest that the broader context is not useful—we have in the United States military, starting at least in the Truman administration, the first most serious American societal effort to end segregation based upon race in a governmentally-driven society or component of society, something that our armed services ought to be very proud that they did for our country.

If you look at the phenomenon or the problem of doing social justice, I think our armed services today have nothing to apologize for in the manner in which they deal with the people who make up the military services, without regard to their race or to any ethnic, racial, or gender considerations. They lead our society in that regard, and it is something else that I think our people in the military services can be proud of that they have done for America.

I have been somewhat alarmed, quite frankly, in some of the discussion that has ensued since the commencement of Operation Desert Shield and the concerns expressed that we are going to have a disproportionate number of people who are disadvantaged and almost pictures of people who are the dregs of society, who make up our armed services, who are participating, and who might become casualties if there were a conflict.

I have difficulty thinking about people in the armed services along class lines, along racial lines, as socioeconomic phenomena. I look upon them, given my confidence in them before, and the fact that it is demonstrated that it was well placed as, if anything, almost the elite of American society. We have so much to be extraordinarily proud of in the context of who makes up our armed services, how brilliantly they have performed in the absolute and critical test, and certainly we mustn't be unmindful of social justice and stamping out the disadvantages that are imposed in elements of our population. I hope that I am as much committed to that as any other Member of this Congress.

America has a very large and unfinished agenda, but I hope that we are not going to translate those problems which are indigenous to the entire society into something that becomes a burden upon our military capabilities or something that relegates any member of our armed services as being less than a first class citizen.

I am just inordinately proud of these people, and they have reason to be proud of themselves and, I think, make an enormous contribution to our country.

I guess it could always be argued that the United States should not undertake any significant external commitments until we have solved each and every domestic, political, social, and economic problem that presents itself, but I would suggest that for the United States not to maintain its strength and its military capability in keeping with the circumstances of the time is not the best insurance that we will be able to better provide for domestic tranquility and for a better life for all of our citizens, regardless of their race, their ethnic background, or their gender.

I think our military is as well devoted to that as any other aspect of American society and, indeed, have been leaders of American society in doing it.

The notion somehow that we have too many people who are black or disadvantaged in the military services in an all-volunteer force could only lead to one practical remedial measure, and that would be to set up a quota and say that once you had a certain percentage of people who were black or disadvantaged, that they or people from that group were no longer eligible to participate in that all-volunteer force even though they looked upon it as a way to serve their country and perhaps even, in doing so, to serve their own economic and social ends. I find it rather repugnant to say that we should put that kind of a cap or that kind of a limit on the opportunity of American citizens to serve their country in the armed services.

Thank you.

The CHAIRMAN. Is there anybody else who would like to ask questions? We would like to keep it a little casual here. Jim, or Neil, or Sonny?

Mr. HUTTO. Just briefly, Mr. Chairman, I would like to say that the media, the American public, and the world were judging the volunteer force, really, for the first time, because it was the first time that we had a sustained combat role since we have had the volunteer force. In 200 years of the Department of Defense's history the greatest change has been this permanent volunteer force on such a large scale, and the biggest single factor that is different from previous history is that 54 percent of the people who are in the three services have families now.

The media seemed somewhat surprised that the commanding officers, from the top on down, were so very, very concerned with the lives of their enlisted personnel.

I don't think any of us on this committee who have worked with the military were surprised. We are not surprised by their excellent education background, we are not surprised by their testing scores, we are not surprised by how efficient they were, how high their morale was. But I think it was good for the public to see how committed they were, how strong they were, how willing to make sacrifices they were, how professional they were on our behalf. So I think it has been a special test that they met with the highest possible standards.

Thank you, Mr. Chairman.

The CHAIRMAN. Neil.

Mr. ABERCROMBIE. Mr. Chairman, I have glanced through all of the material, and I am quite in agreement with everything that has been said so far. But there is a question, and I am going to put it in the context of fairness, although it has nothing to do with the statistics, as such, that are in here.

What I mean by that is, had this war gone on longer or something might happen in the future where a war may be more extended, and if one grants in the context of all of the virtues that have been associated with the volunteer force to this point, what happens still, philosophically speaking now, from the point of view of a society-wide philosophy, to the question of fairness and justice as to who gets to go fight?

If the national interests of the United States are, in fact, at stake, then what are the consequences of a dependency on a volunteer force? That is to say, what happens when a society begins to think that a segment of its society will do the fighting and the rest of the society is exempt from that?

That is, perhaps, not something that you can come up with an ABC answer to, but I hope you understand, I am trying to raise—

Mr. HALE. That was my first line.

Mr. ABERCROMBIE. I beg your pardon?

Mr. HALE. That was going to be my first line.

Mr. ABERCROMBIE. Yes.

Mr. HALE. There is no clear answer to that.

Mr. ABERCROMBIE. No, there isn't, but I think it is something that needs to be discussed, perhaps not necessarily in this context today, Mr. Chairman, but there is the question in my mind as to whether we become reliant—or, let me make it a little conversely—that a segment of our society feels that it is exempt from this simply because it works so well; therefore, they don't have to think about it any further.

Mr. HALE. The only information I have—as I don't really have an answer to your question—is that the All-Volunteer Force had come to be perceived, at least prior to the war, as fair by the American public, or at least quite acceptable. There are a number of surveys. The one I had readily available is from the mid-1980s; something on the order of 85 percent said they thought that the All-Volunteer Force had worked well or fairly well.

That particular survey, which was taken by the National Opinion Research Center, asked people whether they thought the overrepresentation of blacks was acceptable. About three-quarters said yes, it was.

I don't think that answers your questions, though, because those opinions certainly could have changed sharply. I doubt that they have, but they could have with a different set of events in the Persian Gulf. I suspect that we will put off this issue now. But I think we would have had a more soul-searching debate had events taken a different course.

Mr. ABERCROMBIE. Just a moment more on that, Mr. Chairman. I hope the Cato Institute and others then will, perhaps at some future forum, engage in a serious discussion about what constitutes a fair response when the national interest is reputed to be at stake or, in fact, is determined to be at stake.

The last thing, Mr. Chairman, and I think it was touched upon in the previous question, and it is very, very important for this committee. It has to do with—and here I have a bias—installations and facilities. I hope that we can get across to the American people that, with the composition of the All-Volunteer Force that we have, we have families with it, and that means we have to make an investment beyond high technology, we have to make an investment beyond smart bombs, and we have to get smart about people. That means they have to be housed, they have to be clothed—the morale, the welfare, the recreation elements—in other words, the family element of the volunteer Army has to be brought more to the forefront, I think, of the American consciousness. A clear in-

vestment—I hope you would agree—has to be made, not just in recruitment, not just in outfitting troops, but in seeing to it that the conditions under which the troops and their families live is such that you can have retention and you can have the kind of morale and training that will pay off in the kind of results we have seen to this point in the last 6 weeks.

Mr. HALE. You have some cause for concern, too. I think the military construction budget—not family housing so much—is essentially down to zero. Part of the way they have accommodated budget cuts is to eliminate almost all new construction in the 1992–1993 period. It is of concern that we are not replacing our capital stock, which will mean older buildings, and so forth.

The CHAIRMAN. Jim Bilbray, you had a question?

Mr. BILBRAY. Yes, Mr. Chairman. I apologize; I had to go out for a few minutes, and so these questions may have been answered.

Did you give a percentage figure of the minorities' makeup of the actual combat troops that were used in Operation Desert Storm?

Mr. HALE. I can tell you that blacks are somewhat underrepresented in combat arms compared with their total population in the Army. I think the figures are something like these: 31 percent of the entire Army is black, while something like 27 percent of those in the combat arms are black. So they are somewhat underrepresented.

Mr. BILBRAY. OK. The other question was kind of a personal interest question. When I served in the Army, many of the young people that I served with were children of career people in the military. Do we have a large percentage of career people whose children are following in their footsteps?

The reason I ask that question: Have we any likelihood of establishing something like a warrior caste in this country where the children of military people continue to go on and establish a tradition? We know we have this in the officer ranks, because you have third and fourth generation generals and other officers.

Mr. HALE. Going back to this DOD survey again, clearly 3 percent of recruits in 1989 had male parents who were serving in the military, compared with a tiny percent, .03 percent, for all enlistment-age youth. I think this is active-duty male parents. So they are sharply overrepresented. That is, many more recruits have parents who were in the military than would be true of an average family.

Mr. BILBRAY. But it is still very small.

Mr. HALE. But it is still small, right. I mean I don't think there is any risk of the concern you were raising.

Mr. BILBRAY. Thank you.

The CHAIRMAN. Sonny Montgomery has a question.

Mr. MONTGOMERY. Thank you, Mr. Chairman.

Mr. Hale, it is good to see you again.

Mr. HALE. Thank you.

Mr. MONTGOMERY. In your conclusion, I think I read it as your saying the all-volunteer system is not perfect but it really is better than the draft. Is that basically what you said?

Mr. HALE. I don't know if I could go that far to make that particular judgment. It is not perfect in socioeconomic terms, particu-

larly in its racial composition. The draft would be somewhat more representative.

What I didn't deal with here, because it wasn't our topic, is all the disadvantages that conscription imposes. It denies opportunities to serve to some and imposes it on others; it can be socially divisive; and so forth.

It probably isn't my role to say whether it would be a good idea or not, but it certainly has important disadvantages. The All-Volunteer Force, in socioeconomic terms, is broadly representative of the population; we don't have any army of the poor.

Mr. MONTGOMERY. Most military commanders involved in World War II, Korea, Vietnam, and now Desert Storm, say these are the best quality and quickest learners that we have ever had in military service. That should be put in the record. Everybody is saying that, Mr. Chairman. This is the best military force we have ever had, and it must be some credit to the all-volunteer system.

Mr. HALE. Certainly if you went to a lottery-based conscription, you would have more people with lower test scores, and more high school dropouts, because the military has a disproportionately small share of people who score low on the test and a disproportionately high share of high school graduates. So you would not get, by those measures of test scores and educational attainment, as high a quality force if you went to a draft.

I remember, I guess it was in the late seventies, asking some Army generals, if they conducted a poll, how many would favor the All-Volunteer Force, and they thought at that point it was a tiny percentage. I suspect, if you did it now, it would be an overwhelming percentage. So I would certainly agree with you that the Army has endorsed it.

Mr. MONTGOMERY. I was one of those who thought the all-volunteer system would not work, but I am totally supportive of it now.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, and thank you, Bob.

Let's get the other members of the panel. You were going to stay on, Bob, and let's have others come and join.

The others to join the panel for the second half of the program here are: Mr. Doug Bandow, who is a Fellow at the Cato Institute; we have Dr. Edwin Dorn, who is a Senior Staff Member at the Brookings Institution; and we have Dr. Ron Walters, who is Chairman of the Political Science Department at Howard University.

Yes, put the right signs up in front of the right people here.

Gentlemen, thank you very much for joining us today, and let me give each of you a chance to say whatever you would like, and if you would like to comment on the testimony that Bob Hale gave, we would like to hear about that.

Basically, what we are interested in, in the first round, is your view of the conclusion that Bob Hale came to—and I hope I am not misrepresenting Bob Hale's summary—basically, in economic terms, and contrary to an awful lot of articles in the press—there are a number of articles in the back of this briefing book that the staff has prepared which has article after article, op-ed page articles, news articles, et cetera, which essentially say that the military is from the low end of the economic spectrum. What Bob Hale says is not true: there may be some slight tilt toward the lower

income levels, but it is basically representative, at least on income distribution, of the society as a whole. Racial distribution is another matter, and all of the articles and op-eds have essentially gotten it right—which is that essentially it is a higher representation of blacks.

There is also, of course, the contention of Bob Hale, which is that if you go to a draft, you are not going to be able to improve that very much, that because retention is not covered by the draft. Whatever you do, a return to a draft isn't going to affect that very much.

So my question to you all is, do you think this is correct? If it is correct, what do we do about it? If you think that a return to the draft is or is not a good idea, what else can you do if you don't return to a draft to get better balance? Or tell us anything you would like to do.

We will start with Mr. Bandow, then Mr. Dorn, and then Mr. Walters.

STATEMENT OF DOUGLAS LEIGHTON BANDOW, FELLOW, CATO INSTITUTE

MR. BANDOW. Thank you, Mr. Chairman and other members of the panel. I appreciate the opportunity to testify on this subject.

The issue of social representation in the military has long been with us. In the Civil War, we saw draft riots in part because of views that this was not a fair draft with the substitution, the ability to buy substitutes to buy one's way out of the draft. In World War I, 18 percent of draftees were immigrants; almost one-third of draftees were considered to be functionally illiterate, far greater than the general population. Even in World War II, Gen. Leslie McNair commented once that the brightest soldiers were scarcest where the fighting was heaviest. Even within the fighting force itself, you had kind of a disrepresentation in terms of where smart guys went or college-educated folks went.

I think the CBO and DOD studies are quite persuasive that, in general, the All-Volunteer Force is socially representative. I think that on an overall basis in terms of income and socioeconomic status that seems fairly clear.

It strikes me there are two contentious issues that are still left. One is the question of what some have termed the leadership class—whether or not we have enough of the upper classes, of the elites, in our society. Roll Call magazine estimated back, I think, last fall that only two children of Congressional Members were in the Persian Gulf; that later went up to three when a Senator's son was activated from the reserves. That seems small. However, if you look at the number that one would expect based on a representative number, one person figured that out to be 3.6. So we are not talking there about a great underrepresentation of the leadership class. In practice, we are talking about a very small number of people—Harvard graduates, however one wants to define the leadership class.

I think there are very few policy-makers that I am aware of who would make decisions based on this military in terms of whether or not there are more rich kids. I think the very painful debate that

the Congress went through—and, obviously, you Members know that better me—on the decision back in January whether or not to grant the President authority to go to war was a very painful one, and it strikes me that there we saw, both from the White House and in the Congress, the policy-makers, editorialists, and others in our society were very aware of the real costs that a military venture could sustain. So I don't think that we have problem in terms of not enough of a leadership class. There may be a slight lack of representation there, but I don't see it as being a real problem.

The issue of blacks in the military is another one. I think it is important to look at that the relevant number of what you could do with the draft. In 1990 new recruits, about 21 percent were black. About 14 percent of the relevant youth population 18 to 24 are black. So you are talking about, I think, a relatively small disproportionate there. It is down, actually, from 1989, when it was 22 percent of new recruits who were black.

I think a very important factor here is the fact that it is a result of free choice, that a lot of people in disadvantaged communities do see this as being a real opportunity.

What is interesting from the CBO study—I think it was the CBO study; it could have been the DOD study—was that you find the black Americans who are joining today tend to be from the very top of the black community in terms of income and socioeconomic status. Back in 1980, it was much more poorer blacks, more inner city blacks, joining, and there were a lot of studies back in the early eighties or a lot of stories talking about how inner city blacks were no longer able to join because the military was raising standards.

So what we have is, even though there are more blacks in the military than their percentage in the population, we have very high quality folks there, very well educated, very well motivated; it is a very good force.

I think that whether or not we think we have a problem, I don't see an obvious solution out there, and I think it is very important to look at the draft and what its consequences would be. The issue that Mr. Hale alluded to I would like to go into just briefly, some of the problems that you would get with the draft.

The most important one, I think, is, you have to understand, we would get a dumber force, based on high school graduation rates and on AFQT scores, and the military believes those are important. I think if you look at the results of the force over the last decade, where we have seen a great increase in the numbers of soldiers in the top three categories of the AFQT tests and also the number of high school graduates, that it is very important to have a smart force.

In 1990, last year, the Army brought in 95 percent of its recruits who were high school graduates; 95 percent of overall DOD recruits were high school graduates; it is about 75 percent of the 18 to 24-year-old youth cohort. In terms of the top three AFQT scores, the Army brought in 98 percent from those top three categories; the DOD as a whole was 97 percent. The relevant statistic from the youth population as a whole is 69 percent.

So if you had a truly representative draft, you would degrade drastically the quality of your young people coming in. You would

also have more disciplinary problems, and I think, overall, one has to understand that motivation is a very important factor. We have a force today of folks who want to make it, in contrast to folks who want to get out. I think that is very relevant in seeing how we solved the drug problem where, if you had still had a draft, it would have been very hard to solve the drug problem, because the solution in the eighties was to essentially fire people: "If you use drugs, you are out of the service." If you have a draft, you can't do that, because you are, of course, rewarding people because they want to get out, so you would encourage a drug problem as opposed to eliminating it.

I think if you look at the figures where the drug use is dramatically down over the last decade, we have a very well motivated force. I think it would be very hard to explain to the parents of other soldiers, and indeed to other soldiers themselves, that we have to have a dumber force, a less well motivated force, to increase social representation. We would, in fact, be endangering patriotic young Americans who joined in an attempt to change the social composition of the force.

I think the other very important factor is that a draft would not change the social representation very much. The CBO estimate is that, even if you cut the pay in half, you probably could get about 75 percent of your current accessions from volunteers. Even if we kept force levels current, that means out of your 300,000 who come on every year now in new recruits, you are talking about only 75,000 draftees; you are talking about 225,000 volunteers. Of those volunteers, they are more likely to be disproportionately black, because if you have folks who are disadvantaged, they are the most likely to come in if pay has been cut. So what you are likely to do with the draft is primarily switch whites with whites, not to replace blacks with whites.

Even if you assumed that we will have 100,000 draftees and that we will get a true representation with them, we are adding 7,000 whites in that group; we are bringing it down from 21,000 blacks to 14,000 blacks. Because you served 2 years, that means you would be adding to a force of 2,100,000, 14,000 whites, about $\frac{2}{3}$ of a percent; you are not talking about a really serious change in the composition of the force.

To have a greater impact, you would have to draft all of them, and it is hard to imagine that we would go to a system where patriotic young Americans could not join the military, and even then the impact on the overall representation of the military would be about 2 percent; it would be a very small percentage; and, as we get the drawdowns, if, in fact, new recruiting goes down by a third to a half, you are talking about a much smaller impact that a draft could have, because you are dealing with a much smaller number of people coming in.

Finally, I don't think a draft would yield fairness to blacks. I think we have to realize, number one, that blacks will always be overrepresented as long as they reenlist in greater numbers, unless we are willing to tell a qualified black NCO that, because of his race, he cannot re-up, and it is inconceivable, I think, that we could ever say that. So blacks will always be represented in the career force because of that factor alone.

The draft will not affect where people are assigned. What is interesting is, if you look at the numbers in Vietnam, the blacks died in about the same percentage as they represented of the population; they died in greater numbers compared to the proportion of servicemen serving in Vietnam. The figures that I have are, about 3 percent of soldiers in Vietnam were black; about 12.5 percent of deaths were black. In contrast, as Mr. Hale mentioned, the current numbers are that the blacks are somewhat underrepresented in combat arms compared to overall Army today.

Moreover, if you look at individuals, I think a draft would make all blacks worse off. Some blacks who didn't want to serve would be forced to serve; some who wanted to serve would not be able to, because those positions had essentially been taken up by bringing in whites through the draft; and some who wanted to serve and were able to would be paid less.

So, in essence, you would be making all of them worse off, and I think there is a clear problem that we face as a society with inadequate economic opportunities for large numbers of disadvantaged youth, but the solution to that is not to close off another avenue of opportunity, not to foreclose that option for those who want it, and I fail to see how a policy that would make all blacks as individuals worse off could be considered more fair or more equitable as a society.

To conclude, I think the studies of DOD and CBO have shown very clearly the AVF is broadly representative, and I think more important, what Congressman Bateman mentioned, is that it has proved its worth in the most fundamental task that it has, which is to fight and win a war. I think given the fact that it has fought with distinction, that we have a quality force, it would be very risky to tamper with a successful force. I think it would be an enormously risky bit of social engineering that could be justified only if we saw enormous benefits, and I don't see any benefits coming from a draft.

Thank you, Mr. Chairman.

PREPARED STATEMENT OF DOUGLAS LEIGHTON BANDOW

**NEWS FROM THE CATO INSTITUTE FOR IMMEDIATE RELEASE
 NEWS FROM THE CATO INSTITUTE FOR IMMEDIATE RELEASE
 NEWS FROM THE CATO INSTITUTE FOR IMMEDIATE RELEASE
 NEWS FROM THE CATO INSTITUTE FOR IMMEDIATE RELEASE
 NEWS FROM THE CATO INSTITUTE FOR IMMEDIATE RELEASE
 NEWS FROM THE CATO INSTITUTE FOR IMMEDIATE RELEASE**

Contact: Julie Stewart
 (202) 546-0200

VOLUNTEERS, NOT CONSCRIPTS, SOURCE OF MILITARY STRENGTH, STUDY FINDS

WASHINGTON, January 8, 1991 -- Bringing back the draft would have no effect on America's military prowess in the Persian Gulf crisis and would undermine the force of intelligent, educated, and willing troops the United States has amassed during 18 years of an All-Volunteer Force, writes senior fellow Doug Bandow in a new study for the Cato Institute.

"Volunteerism has worked, and worked well. The AVF has delivered soldiers who are not only of above average intelligence but willing warriors, patriots ready to fight for their country. Our problem today is not a military filled with those who want to be there but a political leadership willing to risk war for peripheral interests. A draft cannot change that. If it could, we would not have had to construct a memorial to 58,000 people who died in a purposeless war two decades ago," Bandow writes.

Highlights from the study follow.

* "Experience proves that young Americans are willing to fight for their nation when they believe its future is at stake. . . . The administration's case so far seems to come down to such slogans as 'Make the world safe for monarchy' and 'Keep gas cheap,' sentiments that are not likely to bring out people's patriotism. In short, sluggish recruiting should be seen as a signal that those with the most to lose think Washington is preparing to sacrifice lives for less than convincing reasons, which should cause the administration to rethink its Persian Gulf policy rather than consider conscription."

* Were Congress to approve conscription "it would be at least four

--more--

Cato/Draft/2-2-2

months before the first draftees emerged from training and weeks more before large numbers of conscripts made it into combat." Drafting troops now would have no effect on events in the Middle East, Bandow observes.

* "The military has had no trouble filling its ranks with top-quality people--young men and women who are, in fact, better educated and brighter than their civilian counterparts. During the first half of Fiscal Year 1990, for instance, 91 percent of new recruits had graduated from high school, compared with 75 percent of all 18- to 24-year-olds. . . . Contrary to the conventional wisdom, the services are not the last refuge of society's drags."

* Critics point out that blacks, about one-fifth of military personnel, are overrepresented and therefore victims of injustice. "The injustice is in the lack of opportunities for many blacks and other minorities in American society, not in the opportunities the military offers for upward mobility. There is nothing unfair in allowing people to decide, on the basis of a number of factors ranging from economics to patriotism, that military service is their best option."

* "Coming barely two decades after conscription made it possible for two presidents to prosecute an increasingly unpopular war, the argument that a draft would prevent foreign interventionism is curious. . . . The draft did not deter Lyndon Johnson from sending more than 500,000 soldiers to Vietnam. Although public dissatisfaction eventually ended American involvement in Vietnam, it took years for political opposition to build, a period during which tens of thousands of Americans died needlessly. An AVF might have ended the war far sooner, since young people would simply have stopped volunteering."

"The Volunteer Military: Better Than a Draft" is no. 6 in the Foreign Policy Briefing series published by the Cato Institute, an independent public policy organization in Washington, D.C.



No. 6

January 6, 1991

THE VOLUNTEER MILITARY: BETTER THAN A DRAFT

by Doug Bandow

When the United States was founded more than 200 years ago, conscription was not an issue. Indeed, had the Constitution authorized a draft, there would have been no union. Observes historian Jack Franklin Leach, "It is quite likely that had the delegates at Philadelphia extended the power 'to raise and support armies' by adding the phrase, 'by voluntary means, and if necessary by draft upon the male population,' they would have generated insurmountable opposition throughout the country and in state ratifying conventions."¹ Today, however, many federal powers that would once have been inconceivable seem natural, including conscription.

The first U.S. draft occurred during the Civil War; thereafter, the only major conflict Washington fought without compulsory military service was the Spanish American War. In 1940 Congress approved the first peacetime draft, and conscription continued, with one brief break, until 1973. At that time President Richard Nixon inaugurated the All-Volunteer Force (AVF), in part to help dissipate social conflict over the Vietnam War.

There is no doubt that the volunteer system has succeeded in peacetime. The military has had no trouble filling its ranks with top-quality people--young men and women who are, in fact, better educated and brighter than their civilian counterparts. During the first half of Fiscal Year 1990, for instance, 91 percent of new recruits had graduated from high school, compared with 75 percent of all 18- to 24-year-olds; 96 percent of enlistees scored in the top three (of five) categories of the Armed Forces Qualification Test (AFQT), compared with just 69 percent of civilian

Doug Bandow is a senior fellow at the Cato Institute and a nationally syndicated columnist. The author of Human Resources and Defense Manpower, a National Defense University textbook, he served as a special assistant to President Reagan and worked with the Military Manpower Task Force.

Page 2

youth. The military achieved comparable results throughout the 1980s, despite predictions that continued economic growth would make recruiting difficult (see Appendix 1).

The volunteer military has not been seriously tested in combat, and now that hostilities in the Persian Gulf are a real possibility, a number of observers are advocating a return to the draft. Some say that the falloff in new enlistments since the start of Operation Desert Shield demonstrates that the AVF is failing to meet its first serious challenge.² Other critics worry that volunteerism will not provide enough replacements should war come. Many long-time advocates of conscription complain that the AVF is "unfairly" placing the burden of defense on poor minorities. Finally, some people contend that the AVF has made it too easy for the president to intervene in the Gulf because the policymaking elite has no contact with anyone in the military rank and file.

Do We Need Conscription to Reverse the Drop in Enlistments?

Newspapers have recently been filled with stories about young men who are reluctant to enlist because of the possibility of war in the Gulf. The real stumbling block, however, may be their parents. "When it comes time to get parental consent, the interview stops," says a Milwaukee recruiter.³ Despite the newspaper anecdotes, the magnitude of any falloff is unclear. In a widely noted story, the Washington Post contended that enlistments had dropped sharply since August.⁴ But the Post counted only so-called contract recruits, principally people who sign up under the Delayed Entry Program (DEP) and agree to report within the coming year, rather than accessions, people who actually report for training. Although a drop in the number of DEP recruits could theoretically leave the military short-handed next year, the Army already has signed up enough people to meet 51 percent of its entire FY 1991 accession requirement.⁵ And people who hesitate to commit themselves in advance may, nevertheless, decide to enlist next June.

More critical for the functioning of the military is the number of present accessions. According to the Pentagon, the military came closer to attaining its monthly recruiting goal in August 1990 than it did the previous year (97 percent compared with 94 percent). In September the services significantly exceeded their monthly recruiting objectives, achieving 111 percent overall and 125 percent for the Army. The October numbers were down to 93 percent and 85 percent, respectively, largely because the services had accelerated the induction of some DEP recruits in September. The November

figures are not yet available (see Appendix 2). Given past fluctuations in recruiting, it is obviously too soon to assess the long-term trend.

Whether enlistments have declined or not, getting enough recruits is unlikely to ever be a problem. Says Martin Binkin of the Brookings Institution, "It's unfair to leave the impression that they can't get warm bodies to join."⁶ To quickly increase new accessions, the military would only have to lower its standards slightly and accept a few more people who score in Category IV of the AFQT and are not high school graduates. A draft would not help maintain existing standards because the services are currently attracting recruits who are far above average in intelligence and educational attainment. On the contrary, a truly "representative" draft would result in an inferior force, which would include, for instance, the 10 percent of youths in the bottom AFQT category (V), who are currently not allowed to join.

Moreover, experience proves that young Americans are willing to fight for their nation when they believe its future is at stake. Tens of thousands of young men came forward during the first month after the declarations of war against Spain in 1898, Germany in 1917, and Japan and Germany in 1941. The problem today is not the volunteer military but the fact that the president has not made a convincing case that America's vital interests are at stake or that "liberating" Kuwait is worth dying for. The administration's case so far seems to come down to such slogans as "Make the world safe for monarchy" and "Keep gas cheap," sentiments that are not likely to bring out people's patriotism. In short, sluggish recruiting should be seen as a signal that those with the most to lose think Washington is preparing to sacrifice lives for less than convincing reasons, which should cause the administration to rethink its Persian Gulf policy rather than consider conscription.

Do We Need a Draft to Fight a Persian Gulf War?

Military analyst Edward Luttwak told the Senate Armed Services Committee that "you must indeed consider the draft for good and substantial reasons."⁷ New York governor Mario Cuomo contends that "you can't ask soldiers to fling their bodies in front of tanks and say, 'We'll take our chances on reinforcements.'" Former Navy secretary James Webb and columnist Mike Royko have made similar arguments.

Even the worst-case scenarios do not predict a lengthy conflict that would require a massive U.S. force, as did World War II during which total military personnel reached 12

Page 4

million, that might be adversely affected by a refusal of young people to volunteer. For instance, the Center for Defense Information, a group critical of Operation Desert Shield, estimates that the United States could, with roughly 300,000 troops--less than the number now stationed in Gulf--conquer Iraq in about three months. Total casualties would be approximately 45,000.¹⁰ Even if the conflict proved to be longer and more expensive, the United States has significant active-duty units elsewhere in the world as well as additional reserve units that could be called upon. Moreover, America's "allies" could contribute far more forces if they truly believed a war to crush Saddam Hussein was worth fighting.

The United States also has a special reserve force whose sole purpose is to provide combat replacements. The Individual Ready Reserve (IRR) is made up of nearly a half million former active-duty soldiers (plus a very few volunteer reservists brought in as part of a short-lived experimental program) who have some time remaining on their military service obligation (see Appendix 3). IRR members are available to be called up to fill in for casualties. Not only have they been through boot camp, they have also served and trained in military units, which makes them better replacements than green conscripts.

In any case, new draftees would be unlikely to get into the field before a Persian Gulf war was over. Although the Selective Service System maintains a list of registrants that theoretically allows the agency to begin conscription at the drop of a hat, not all 18-year-olds register and virtually none send in address changes, which makes the list questionable at best.¹¹ Thus, the agency might have to hold a new registration to produce an accurate list. Even after Selective Service began its call-up, young people would have to be given at least a week to settle their affairs before being inducted, and inductees would go to boot camp, not the field. Training of Army recruits takes eight weeks, followed by specialized-skill training to prepare new soldiers for their specific jobs. It takes the Army 13 weeks to graduate an infantryman from its One-Station Unit Training program, in which about one-third of its accessions participate. The same course averages about four weeks longer in the regular, non-OSUT program,¹² and training for other military occupational specialties takes even more time. Thus, once Congress approved conscription, a process that itself could be lengthy, it would be at least four months before the first draftees emerged from training and weeks more before large numbers of conscripts made it into combat.

Once the war was over, the draft would probably be dismantled because the Pentagon would need fewer new accessions in coming years. Before the Persian Gulf crisis, Congress voted to cut total troop strength by 425,000 over the next five years; a war with Iraq may extend the timing but is not likely to change the magnitude of the planned reductions. The Army alone has been told to pare its ranks from its current 730,000 to 520,000 by the end of FY 1995.

Of particular significance is the fact that the Pentagon disclaims any interest in resurrecting conscription. Those closest to a prospective war recognize that a draft would be of little value and result in potentially enormous costs: increased personnel turnover, more disciplinary problems, an entire force geared to getting out of rather than staying in the military, and unpredictable social turmoil.¹³ Moreover, the president almost certainly understands that a proposal to institute conscription, by introducing political dynamite to the debate over the Persian Gulf, would greatly complicate his efforts to maintain public support for his policies. That realization alone probably caused him to state that he believed the AVF to be "as strong as it can be" and that he did not support a draft.¹⁴

Is It "Unfair" to Rely on Poor and Nonwhite Volunteers to Fight America's Wars?

For years critics of the AVF have been charging that the United States has an army of the poor, and those voices are now growing louder. John Kenneth Galbraith recently declared, "Deployed on the sands of Saudi Arabia and facing possible extinction, are young men and women drawn, in the main, from the poorer families of our republic."¹⁵ Governor Cuomo raised the same issue by telling columnist William Safire in an interview on the Persian Gulf that "I'm not going to raise the fairness question" about a poor man's army, "but I'd like to hear what the President has to say about that."¹⁶

Unfortunately, that argument is not supported by the facts. Throughout the 1980s military recruits were smarter and better educated than their civilian counterparts. Ten percent of young people scored in the bottom AFQT category (V); the military took none of them. Twenty-one percent scored in Category IV, but the military drew just 4 percent of recruits from that group in the first half of 1990.¹⁷ An Ohio State University study found that recruits have greater educational aspirations than their civilian counterparts. In short, contrary to the conventional wisdom, the service are not the last refuge of society's dregs.

Page 6

If the officer corps is excluded, the military is not quite equal in social status to the civilian world, but the differences are small. According to a 1989 Pentagon survey, the family backgrounds of recruits were slightly more blue collar than those of youth generally. Parents of recruits had roughly the same rates of college attendance as did parents of civilian youth. Enlistees' fathers are relatively more likely to be skilled production workers than professionals or executives.¹⁸ Similarly, a 1989 Congressional Budget Office study found that young men from families with incomes 20 percent below average were only marginally more likely to join the military than were those from families with incomes 20 percent above average.¹⁹

The percentage of "rich kids" in the military is below their proportion of society, but they are there. A Rand Corporation study, conducted in 1977, a difficult recruiting year, concluded that "military service apparently continues to be viewed as an alternative employment option for a very broad cross section of American society, from the wealthiest to the poorest."²⁰ Similarly, Sue Berryman of Columbia University argues that "the data show incontestably that enlistees . . . do not come from the more marginal groups on any of four dimensions: family socioeconomic status, measured verbal and quantitative abilities, educational achievement, and work orientation."²¹

Blacks, who make up about one-fifth of total personnel, are somewhat overrepresented in the military. During the first half of 1990, 21 percent of new recruits were black, compared with 14 percent of civilian youth. Army personnel sent to the gulf as of mid-November were 28.7 percent black. Although allegations of racism most often come from white pundits, one black U.S. Naval Reserve medic complained to a reporter, "I think it's wrong to have so many black men out there." The soldier's father, a firefighter, said he felt his son was being penalized because he could not afford to send him to college. "That's the unfairness I don't like."²²

The problem with that argument is twofold. First, the injustice is in the lack of opportunities for many blacks and other minorities in American society, not in the opportunities the military offers for upward mobility. There is nothing unfair in allowing people to decide, on the basis of a number of factors ranging from economics to patriotism, that military service is their best option. What would be wrong would be to create a military made up of those who did not want to serve, which would close off yet another avenue to well-qualified minorities. In fact, a draft would make everyone worse off: blacks who did not want to serve but who

were drafted and blacks who wanted to serve but were not able to join because conscripts filled the first-term slots, as well as similarly situated whites.

Second, a draft would do little to change the racial composition of the armed forces. At most, assuming that all voluntary enlistments were barred (an obviously ludicrous policy) and that an equal proportion of all racial groups was conscripted (which is highly unlikely), at today's force levels a draft would bring something under 300,000 new people a year. Of them, 42,000 would be black, compared with 63,000 blacks among 300,000 volunteers. Conscripts serve two years, so those 21,000 extra whites coming in every year would boost the share of whites in our force of 2.1 million by just 2 percent. Moreover, unless pay were cut sharply, a difficult political task since a draft would be so selective--taking at most fewer than one out of five 18-year-old males--a draft could easily account for fewer than 100,000 new accessions. Then the total impact on the racial composition of the military would be less than two-thirds of 1 percent.

The point that supporters of a racially based draft ignore is that blacks will remain overrepresented as long as they are allowed not only to enlist but also to ~~reenlist~~. When asked about the overrepresentation of blacks in the military, Gen. Colin Powell, chairman of the Joint Chiefs of Staff, answered, "If it were unfair--and I don't accept that--the only way to correct that unfairness would be for somebody to instruct me to set a limit--I won't say quote--on the number of blacks allowed to enlist."²³ Yet it is inconceivable that the United States would ever tell blacks that, because of their race, they could not serve or reenlist.

Similarly, conscription will have no impact on the duties to which blacks are assigned. A black conscript who has not graduated from high school would be far more likely to end up in an Army combat unit than a white graduate of Harvard, whether or not the latter was drafted. Such channeling occurred even in World War II, which is frequently pointed to as the conflict during which a draft was the great equalizer.²⁴

Could a Draft Prevent Foolish Intervention Abroad?

Coming barely two decades after conscription made it possible for two presidents to prosecute an increasingly unpopular war, the argument that a draft would prevent foreign interventionism is curious. A variant of the "unfairness" critique, it suggests that irrespective of the overall composition of the AVF, the problem is that the nation's

Page 8

opinion-making elite, the "leadership class," in columnist Stephen Rosenfeld's words, is not serving.²⁵ Only two congressmen have children stationed in the gulf, according to Roll Call magazine. As a result, explains former Navy secretary James Webb, "What I worry about is that today the people who are making policy are totally dislocated, in a human way, from the people who are out there."²⁶ Journalist James Fallows makes a similar point. "The people who are making this decision can't imagine they are going to pay any human cost for it."²⁷

That charge is simple to make but hard to prove. Neither Webb nor Fallows has presented any evidence that President Bush is prepared to send thousands of people to their deaths because his own children, or those of his friends, are not at risk. William F. Buckley, Jr., argues that the complaint that we have an army of the poor

does not justify the suggestion that decisions affecting the risk of combat will be made by men indifferent to their fate because they are themselves sons of power and affluence. A reader of Ronald Reagan's memoirs will know the agony he experienced when the 241 Marines were killed in Lebanon. The sons (and daughters) of influential Americans are regularly spotted trying to gain admission to West Point or Annapolis. The notion that the President or Congress is indifferent to the life & limb of our armed forces in virtue of having ascertained that they are substantially made up of children of the working class is bizarre as a generality, contemptible as presumptive consideration of an American Commander-in-Chief contemplating the question of war and peace.²⁸

In any case, a draft that affected between 1 of 5 and 1 of 15 young men would not bring in many sons of congressmen.²⁹

Fewer still would end up in combat units in the Persian Gulf. It is simply an illusion to think that the children of power and privilege will not be able to manipulate a draft system. Even Webb acknowledges that the elite were able to avoid military service during the Vietnam War.

Moreover, writes Rosenfeld, "I think one can observe among the public a distinct reluctance to regard our professional soldiers as paid 'mercenaries' and therefore dispensable." People are, he adds, "treating them not as cannon fodder but as fellow citizens whose fate must find its place in the policy equation." Indeed, he argues, parents without children in the gulf seem to be identifying with parents of

soldiers at risk by believing that "they should not support a policy they believe is pointed toward war unless they would be prepared to see their own sons fight." As a result, concludes Rosenfeld, "Far from making Americans more warlike, the absence of a draft turns some of them more toward peace."³⁰

That pervasive recognition of the real stakes of war, even among the governing elite, is heightened by the fact that officers, who are more likely to come from upper socioeconomic groups, also die in conflict. Moreover, the reserve call-ups have caused ripple effects throughout society. Construction workers, firefighters, prison guards, electricians, students, farmers, coaches, and teachers have all been sent to the Gulf. So too have doctors, nurses, pilots, and lawyers. Some small towns have been particularly hard hit, but even Washington, D.C., a community usually insulated from reality, has felt the impact of departing reservists. The law firm of Coyne Savits & Lopate, for instance, has so far lost 4 of 57 attorneys.³¹ The departure of reservists, who by and large have more political clout than the average 18-year-old draftee, affects not only families and friends but also business associates, clients, and many others. For legislators and the president to carelessly send those people into war risks serious retaliation at the polls.

In fact, the complaint that enlistments have fallen off belies the argument that a volunteer military allows the government to intervene more easily abroad. If the president does not make a solid case that vital American interests are at stake, the age groups most affected can simply say no to military service. In contrast, a draft ensures a steady stream of new occasions irrespective of public sentiment. Although Webb contends that the president would not have deployed troops to the Persian Gulf if he had had to rely on a conscript military, initial polls show that Bush's action was widely supported; it was only the president's November decision to double American troop strength in preparation for attacking Iraq that raised significant popular doubts. Moreover, the draft did not deter Lyndon Johnson from sending more than 500,000 soldiers to Vietnam. Although public dissatisfaction eventually ended American involvement in Vietnam, it took years for political opposition to build, a period during which tens of thousands of Americans died needlessly. An AVF might have ended the war far sooner, since young people would simply have stopped volunteering.

Page 10

Conclusion

It has been 18 years since the Pentagon issued its last draft call, and for 18 years some people have been pushing for a return to conscription. The possibility of a Persian Gulf war is merely their latest excuse. But volunteerism has worked, and worked well. The AVF has delivered soldiers who are not only of above average intelligence but willing warriors, patriots ready to fight for their country. Our problem today is not a military filled with those who want to be there but a political leadership willing to risk war for peripheral interests. A draft cannot change that. If it could, we would not have had to construct a memorial to 58,000 people who died in a purposeless war two decades ago.

Appendix 1**Military Recruiting Results (Percentage)**

	Objective Met	High School Graduates	AFQT Categories I through III
1990*			
DoD	101	91	96
Army	103	89	96
Navy	100	36	91
Marine Corps	101	93	99
Air Force	100	99	99+
1989			
DoD	101	92	94
Army	101	90	93
Navy	101	90	89
Marine Corps	101	95	99+
Air Force	100	99	99+
1988			
DoD	100	93	95
Army	100	93	96
Navy	100	91	91
Marine Corps	101	95	99
Air Force	100	99	99+
1987			
DoD	100	93	95
Army	101	91	96
Navy	100	91	90
Marine Corps	101	98	99+
Air Force	100	99	99+
1986			
DoD	100	92	96
Army	100	91	96
Navy	100	85	90
Marine Corps	100	98	99+
Air Force	100	99	99+
1985			
DoD	100	93	93
Army	100	91	91
Navy	100	89	90
Marine Corps	100	97	96
Air Force	100	99	99

Source: Assistant Secretary of Defense, Force Management and Personnel.

*First half of FY 1990, October 1, 1990, to March 31, 1991.

Page 12

Appendix 2**Enlisted Accessions, June 1989 through November 1990**

Service	<u>June</u>		<u>July</u>		<u>Aug.</u>	
	89	90	89	90	89	90

Total Accessions (Thousand)

Army	7.1	5.5	13.3	9.9	14.5	9.4
Navy	9.7	6.5	10.9	9.3	11.0	9.1
Marine Corps	3.0	3.6	3.4	3.1	3.5	3.4
Air Force	3.3	2.9	3.5	3.1	4.6	3.5
DoD	23.2	18.4	31.1	25.4	33.7	25.4

Recruiting Objective (Thousand)

Army	7.1	5.4	14.6	10.0	16.7	10.3
Navy	9.6	6.5	10.9	9.3	11.0	9.1
Marine Corps	3.0	3.5	3.4	3.1	3.4	3.3
Air Force	3.3	2.9	3.5	3.1	4.6	3.5
DoD	23.0	18.4	32.4	25.5	35.9	26.2

Percentage of Objective Met

Army	100	101	91	99	87	92
Navy	101	100	100	100	100	100
Marine Corps	101	101	101	102	100	103
Air Force	100	100	100	100	100	100
DoD	101	101	96	100	94	97

Appendix 2--Continued

Service	<u>Sept.</u>		<u>Oct.</u>		<u>Nov.</u>	
	89	90	89	90	89	90
Total Accessions (Thousand)						
Army	13.0	13.3	9.7	9.4	8.4	NA
Navy	10.3	8.1	4.1	6.5	5.2	NA
Marine Corps	3.5	3.3	2.9	3.4	2.7	NA
Air Force	4.3	2.9	4.1	2.5	3.1	NA
DoD	31.1	27.6	20.8	21.8	19.4	NA
Recruiting Objective (Thousand)						
Army	12.8	1.6	8.8	11.1	8.4	12.5
Navy	10.3	8.1	4.1	6.5	5.2	5.7
Marine Corps	3.8	3.3	2.9	3.4	2.7	2.6
Air Force	4.3	2.9	4.1	2.5	3.1	2.3
DoD	31.1	24.9	19.8	23.4	19.4	23.1
Percentage of Objective Met						
Army	101	125	111	85	99	NA
Navy	100	100	100	100	100	NA
Marine Corps	94	100	100	101	102	NA
Air Force	100	100	100	100	100	NA
DoD	100	111	105	93	100	NA

Source: Office of the Assistant Secretary of Defense, Public Affairs.

Note: NA = data not available.

Page 14

Appendix 3

Individual Ready Reserve, FY 1990

Army National Guard	11,036
Army Reserve	284,221
Navy Reserve	87,439
Marine Corps Reserve	36,825
Air Force Reserve	68,714
Coast Guard Reserve	5,109

Total	493,344
-------	---------

Source: Office of the Assistant Secretary of Defense for Reserve Affairs.

Notes

1. Jack Franklin Leach, Conscription in the United States: Historical Background (Rutland, Vt.: Tuttle Publishing Co., 1952), p. 12.
2. Columnist Mark Shields argues that the volunteer military is no longer voluntary because the Army has frozen departures. "The End of the All-Volunteer Army," Washington Post, December 1, 1990, p. A19. However, sticking around in the face of imminent hostilities is an implicit part of a volunteer's bargain. No military could fight if essential servicemen departed in the midst of a fire fight. The basic point is, every soldier now in uniform chose to serve.
3. Bill Turque, "Not Just an Adventure," Newsweek, December 10, 1990, p. 39.
4. George Wilson and Mary Jordan, "Fewer Are Rallying round the Flag," Washington Post, November 28, 1990, pp. A1, A30.
5. Office of the Assistant Secretary of Defense, Public Affairs.
6. Turque.
7. Doug Bandow, "Replace Registration with the Reserve Volunteer Force," The Anthropro Factor in Warfare: Conscripts, Volunteers, and Reserves, ed. Lee Austin (Washington: National Defense University, 1988), p. 338.
8. "Military Men Bash Buildup in Gulf," Washington Times, November 30, 1990, p. A3.
9. William Safire, "Cuomo on Iraq," New York Times, November 26, 1990, p. A19.
10. Center for Defense Information, "U.S. Invasion of Iraq: Appraising the Option," Defense Monitor 19, no. 8 (1990).
11. See, for example, Bandow, pp. 342-45.
12. Doug Bandow, Human Resources and Defense Manpower (Washington: National Defense University, 1990), pp. 141-43.
13. See, for example, G.V. (Sonny) Montgomery, "The Last Thing We Need Now Is to Go Back to the Military Draft," Washington Post, December 4, 1990, p. A17; Casper Weinberger, "America's Best Defense--Its All-Volunteer Force," Forbes, January 7, 1991, p. 29.

Page 16

14. Susan Rasky, "House Leaders Tell President Not to Call Special Iraq Session," New York Times, November 30, 1990, p. A11.

15. John Kenneth Galbraith, "(Class) War in the Gulf," New York Times, November 7, 1990, p. A31.

16. Safire.

17. The overall Army enlisted force does not score as well as new recruits, since the brightest people are more likely either to become officers or to return to civilian life, but a draft only brings in first-term soldiers. Moreover, conscription would cause reenlistments to fall, since few draftees want to remain in the service, and actually exacerbate the long-term problem of "representativeness."

18. Directorate for Accession Policy, Office of the Assistant Secretary of Defense for Force Management and Personnel, Population Representation in the Military Services: Fiscal Year 1989 (Washington: DoD, July 1990).

19. Richard Fernandez, Social Representation in the U.S. Military (Washington: Congressional Budget Office, October 1989).

20. Richard Cooper, Military Manpower and the All-Volunteer Force (Santa Monica, Calif.: The Rand Corporation, 1977), p. 231.

21. Sue Berryman, Who Serves? The Persistent Myth of the Underclass Army (Boulder, Colo.: Westview Press, 1988), p. 4.

22. Lynne Duke, "For Many Blacks, Call to Duty Rings of Inequality," Washington Post, November 28, 1990, pp. A1, A30.

23. Lynne Duke, "Gen. Powell Notes Military Enlistment Remains Matter of Individual Choice," Washington Post, November 28, 1990, p. A30.

24. Doug Bandow, "An Involuntary Military: Paying More for Less," in The Anthropro Factor in Warfare, p. 261.

25. Stephen Rosenfeld, "President, Army, People," Washington Post, November 23, 1990, p. A31.

26. Cathryn Donohoe, "Who's in the Army Now," Washington Times, November 21, 1990, p. E1.

27. Quoted in Jason DeParle, "War, Class Divisions and Burden of Service," New York Times, November 13, 1990, p. A14.

28. William F. Buckley, "Wartime?" National Review, December 3, 1990, p. 62.

29. Columnist Mike Royko proposes as a "fair" draft one that conscripts not only the children of government officials, business executives, and the wealthy but also Vice President Dan Quayle and anyone who wrote a column, editorial, or letter to the editor urging war. Mike Royko, "Reviving the Draft with Justice," Washington Times, December 5, 1990, p. C4.

30. Rosenfeld.

31. "Jordan, Coyne Reservists Stand Ready to Serve," Washington Lawyer, November/December 1990, p. 20; Larry Witham, "Gulf Call-ups Get Lawyers into Uniform," Washington Times, December 6, 1990, p. B2.

OTHER STUDIES IN THE FOREIGN POLICY BRIEFING PAPERS SERIES

5. **Time for Congress to Vote on the Issue of War in the Gulf** by Christopher Layne and Ted Galen Carpenter (December 14, 1990)
4. **Do We Need to Go to War for Oil?** by David R. Henderson (October 24, 1990)
3. **Banking on Poverty: An Insider's Look at the World Bank** by Michael H. K. Irwin (September 20, 1990)
2. **The Rise of the Middle Eastern Bogyman: Sliding Toward Post-Cold-War Interventionism** by Leon T. Hadar (September 5, 1990)
1. **NATO in the 1990s: Burden Shedding Replaces Burden Sharing** by Rosemary Fiscarelli (June 26, 1990)

OTHER STUDIES IN THE POLICY ANALYSIS SERIES

144. **Long-Term Care: Why a New Entitlement Program Would Be Wrong** by Peter J. Ferrara (December 13, 1990)
143. **Why Trade Retaliation Closes Markets and Impoverishes People** by Jim Powell (November 30, 1990)
142. **Arabian Nightmares: Washington's Persian Gulf Entanglement** by Christopher Layne and Ted Galen Carpenter (November 9, 1990)
141. **Term Limitation: An Idea Whose Time Has Come** by John H. Fund (October 30, 1990)
140. **The Collision Course on Textile Quotas** by Thomas Grennes (September 12, 1990)
139. **Aiding Eastern Europe: The Leveraged Harm of "Leveraged Aid"** by Malania S. Tammen (September 10, 1990)
125. **Creating a U.S. Policy of Constructive Disengagement in the Middle East** by Leon T. Hadar (December 29, 1989)
90. **Where Angels Fear to Tread: The United States and the Persian Gulf Conflict** by Sheldon L. Richman (September 9, 1987)

Published by the Cato Institute, *Cato Foreign Policy Briefing* is a regular series evaluating government policies and offering proposals for reform. Nothing in *Cato Foreign Policy Briefing* should be construed as necessarily reflecting the views of the Cato Institute or as an attempt to aid or hinder the passage of any bill before Congress.



Contact the Cato Institute for reprint permission. Additional copies of *Cato Foreign Policy Briefing* are \$2.00 each (\$1.00 in bulk). To order, or for a complete listing of available studies, write to: Cato Institute, 224 Second Street, S.E., Washington, D.C. 20003, (202) 546-0200, Fax (202) 546-0728.

The CHAIRMAN. Thank you.
Mr. Dorn.

STATEMENT OF EDWIN DORN, SENIOR STAFF MEMBER, CENTER FOR PUBLIC POLICY EDUCATION, THE BROOKINGS INSTITUTION

Mr. DORN. Thank you, Mr. Chairman.

Let me begin by answering your direct question, which is whether or not I concur with CBO's findings, and then move on to make some broader observations about what this debate is all about.

Generally, Mr. Chairman, I concur with the essential finding of the Congressional Budget Office, which is that today's force is not an Army of the dispossessed. However, I guess I would phrase the issue a little bit differently, because it seems quite clear to me that today's force is recruiting from a narrower band on the socioeconomic spectrum than was true of the draft era military.

Clearly, for example, the rank and file contains far fewer college graduates than did the draft era military. Critics, such as our mutual friend, Charles Moskos, have documented that very well. But it is also true and often overlooked that today's force also contains precious few high school dropouts. What that means, of course, is that today's all-volunteer force does not consist of a desperately disadvantaged underclass. Indeed, one of the ironies is that our most disadvantaged citizens probably would not qualify for enlistment in the force.

It is certainly unfair, therefore, to characterize today's enlistees as economic conscripts, as young people forced to choose between destitution on the streets of our cities and combat danger in the sands of Arabia. Considering the employment options that are available to today's high school graduates, which generally consist of low wage, service sector jobs, with very little career mobility, military service seems a rational economic option.

Further, Mr. Chairman, if I may share an anecdotal comment, during the past several years I have talked with hundreds of soldiers, with recruits going through their first few weeks of basic training at Fort Knox, with NCO's sitting around a table at the officer's club at the 82nd Airborne near Fort Bragg, with 11th Armored Cavalry soldiers patrolling the Fulda Gap in West Germany, and what struck me, Mr. Chairman, was that generally these men and women seemed less concerned about their origins than about their destinations. They saw the military as a source of tremendous opportunity, and they saw themselves as professionals trained to fulfill an important responsibility; they certainly didn't see themselves victims; and I think that those of us who comment on the military do our enlisted personnel a great disservice by suggesting that they are economic conscripts who have no choice.

Now let me make some broader comments, Mr. Chairman. First, my sense is that, often as not, complaints about the composition of the force are really not complaints about the force at all; rather, they are complaints about inequities in the larger society. One senses that as one listens to people such as McGeorge Bundy or Charlie Moskos, who talk less about who is in the force than about who is not in the force. This is a propos Mr. Abercrombie's question earlier, and I share the concern, the moral concern, that those who

appear to benefit most from the fruits of this society are those who appear to serve it least. That is a fundamental moral concern, but, as Mr. Bandow said, it is not a concern that can be addressed by returning to conscription, and I think he stated that argument quite well.

The fact of the matter is that, given current economic incentives, a draft is not likely to change the social or the race composition of the military appreciably. It would be a horrendous political fight with very little social gain.

Second, Mr. Chairman, to the extent that debates over composition of the force are really debates over larger issues, I must say that this Nation's leaders have not done a very good job of addressing those larger questions. As a matter of fact, what I sense is that the Bush administration's very deft handling of the Persian Gulf crisis may have served to accentuate deficiencies in its domestic policy.

Mr. Chairman, it seems to me that this committee can take some modest steps to ensure a couple of things. One is that the military remains a leader in providing equal opportunity. As I mentioned in a statement that I will submit for the record, the disparity between the representation of black Americans in the enlisted ranks and black Americans in the officer corps is quite sharp. Let me put it in a way that it is not normally put. Roughly one out of six whites in the military is an officer; roughly one out of 20 blacks in the military is an officer.

To the extent that the production of officers depends on the opportunity to attend college, this committee may wish to look at the distribution of ROTC scholarships. I suggest that that examination might be particularly worthwhile in the Air Force, which is the only service that, during the 1980's, actually suffered a loss of accessions at the entering officer level—that is, a loss in the percentage of blacks entering at the O1 level.

Further, Mr. Chairman, a propos another matter, it seems that the committee may wish to encourage the services to develop well tailored transition programs that helps veterans adjust to a very tight civilian labor market. For reasons we can go into in greater detail later, those transition programs may be disproportionately beneficial to the large numbers of blacks who serve in the military.

Finally, Mr. Chairman, let me concur very strongly with the comment that Mr. Montgomery made earlier on. Man for man and woman for woman, the All-Volunteer Force is a stronger force than any this Nation has had before.

Thank you, Mr. Chairman.

PREPARED STATEMENT OF EDWIN DORN

WHO DEFENDS AMERICA?

THE SOCIAL COMPOSITION OF THE ARMED FORCES

Statement To The

Committee on Armed Services

U.S. House of Representatives

March 4, 1991

Mr. Chairman and Members of the Committee, my name is Edwin Dorn and I am a senior staff member at the Brookings Institution. I appreciate the opportunity to appear at this hearing on the social composition of the armed services. This statement reflects my views, not those of my employer.

The Persian Gulf conflict, with its potential for a land war that could have caused thousands of U.S. casualties, revived a dormant debate over who defends America. At the heart of the debate is whether economic incentives or conscription should be used to fill the force.

Critics of the all volunteer force charge that the military exploits the economic desperation of minorities and poor whites, and that the AVF's resulting composition makes its use more likely than would be the case with a more representative force. This line of argument was captured in a recent op-ed caption, "No Blue Blood Will Flow."

Supporters of the all volunteer force tend to respond that its social make-up is irrelevant. A conscript force might be expected to reflect the composition of the larger society, this

argument goes, because proportional representation is evidence that every group is bearing its fair burden. But a volunteer force need not be representative.

It is true, of course, that enlistees are volunteers; but that does not explain why blacks are considerably more likely to volunteer than whites. Such racial disproportions as exist in today's military could take on great political significance in wartime. It would be disingenuous to suggest otherwise.

My views can be summarized as follows:

- o Often as not, complaints about the social make-up of the military are not really about the military. Rather, they are about inequities in the larger society.

- o Our nation's leaders have not done a good job of addressing those larger issues. The Bush administration's deft handling of the Persian Gulf crisis has accentuated its domestic policy deficiencies.

- o One of the things the conflict demonstrated was the high quality of the AVF's people. Man for man and woman for woman, today's force is the best in history. The military also has been a leader in expanding opportunities for minorities and women, thereby demonstrating that quality and equity are complementary.

- o This Committee can take steps to help the military remain a leader in providing equal opportunity. As the services make reductions in force, the Committee also can encourage them to implement transition programs that will help veterans adjust

to a tight civilian job market.

CLASS

The all volunteer force, which came into being in 1973, clearly has a different class composition than did the draft era military. Today's force is recruited from a narrow band of the socio-economic spectrum, compared with the spectrum that existed during Viet Nam, Korea and World War II.

The educational background of recruits is one good indicator of this. As its critics have charged, the AVF has very few college graduates in the rank-and-file. By contrast, it was not unusual to find people with BAs, even master's degrees, in the lowest ranks of the draft era military. On the other hand, the AVF also has very few high school drop-outs. In recent years, than 90 percent of enlistees have been high school graduates, and those who have not graduated must score very well on the services' standardized examination.

Although AVF enlistees certainly are not "blue bloods", neither are they members of a desperately disadvantaged "underclass." Indeed, our most disadvantaged citizens are not likely to qualify for enlistment. Years ago, judges could give young offenders the option of going to jail or joining the military. That option no longer exists.

It is unfair, therefore, to characterize today's enlistees as "economic conscripts", as young people forced to choose between destitution on the streets of our inner cities and combat danger in the sands of Arabia. Considering the civilian

employment options that are available to today's high school graduates -- generally, low-wage service sector jobs with little long-term career potential -- military service is a rational economic choice.

During the past several years, I have interviewed hundreds of soldiers -- recruits in their first few months of training at Fort Knox, NCOs serving with the 82nd Airborne at Fort Bragg, 11th Armored Cavalry troops patrolling the Fulda Gap in West Germany. Generally, these men and women seemed to care less about their origins than about their destinations. They saw the military as a source of great opportunity, and themselves as professionals trained to fulfill an important responsibility. They did not see themselves as victims. We do them a disservice if we suggest that they had no choice but to join the military.

RACE AND ETHNICITY

The AVF also has far more blacks -- 20 percent of all active duty forces and 30 percent of the active duty Army -- than did the draft era military. However, other minority groups are not overrepresented. Hispanics are about eight percent of the U.S. population, but make up about five percent of the active force. The apparent underrepresentation of Hispanics has not been explained, but it suggests that economic incentive is not the sole determinant of a group's propensity to enlist. Asian-Americans (more than two percent of the active force) and Native Americans (just under one percent) are represented roughly in proportion to their presence in the U.S. population.

Roughly 25 percent of this country's Desert Storm contingent is black, so if the coalition forces had become bogged down in sustained ground conflict with Iraq, about one-fourth of U.S. casualties would have been black. Since blacks are only one-eighth of the nation's civilian population, this level of combat exposure would be disproportionate, and grounds for resentment.

Those blacks who were most outspoken (or at least most widely quoted) about the Persian Gulf crisis tended to be those who opposed the Bush administration's policy. It was these voices of opposition that echoed across Capitol Hill on January 12, when black Members of Congress voted overwhelmingly against the resolution authorizing war.

On the whole, the black community was ambivalent about administration policy. Public opinion polls revealed that whites strongly supported the use of force against Iraq; blacks were evenly divided.

High U.S. casualty rates could easily have turned that ambivalence into opposition, however. Across black America, one heard allegations that young black men and women were being used as "cannon fodder." That charge could easily have struck a responsive chord in a community which felt that it had borne the brunt of Reagan era cuts in domestic programs and which believed, further, that black Americans had done more than their fair share of the fighting and dying in Vietnam.

The latter belief stems from a period when the black fatality rate was disproportionately high, compared both with

overall population representation and with representation in the theater of operations. In 1965 and 1966, blacks made up 20 percent of the Army's battle deaths and 16 percent of all U.S. combat fatalities in Southeast Asia. These figures motivated Dr. Martin Luther King, Jr. to argue, during a sermon at New York's Riverside Church in the spring of 1967, that young black men were being sent thousands of miles "to guarantee liberties in Southeast Asia which they had not found in southwest Georgia." Many political leaders, including some civil rights activists, rebuked King for those remarks; but his protest reverberated throughout black America.

Changes in Selective Service rules eventually led to the drafting of large numbers of white college students who, until the late 1960s, had been able to get deferments easily. Those changes evened out the combat risk: in the end, blacks made up about 12 percent of all U.S. military personnel who were killed in battle during the Vietnam conflict. Of course, the ending of college deferments also contributed to the growth of anti-war sentiment on America's college campuses.

Following Vietnam, little effort was made to alter the widespread perception that blacks bore the brunt of battle. Thus, as war loomed in the Persian Gulf, resentments over injustices real and perceived were widespread in the black community. The nation's political leaders did little to dampen the political explosion that surely would have come, had the war gone badly.

THE REAL ISSUE

Most of the time, of course, the nation is not at war; and even when it is, only a small percentage of military personnel are actually engaged in combat. One worst case scenario for Desert Storm projected 16,000 U.S. casualties, of whom about 4,000 would have died. The latter figure represents less than one percent of the half-million U.S. military personnel in the Persian Gulf region and a miniscule proportion of the nation's three million military personnel. In the end, U.S. casualties were remarkably low and fewer than 100 Americans died in battle.

This is not to trivialize war. Even one death in combat is too many, a tragedy that shatters families and saddens whole neighborhoods. But as a statistical matter, a black soldier in the Persian Gulf region was not at significantly greater risk than a young black man living in one of our drug-infested inner city "war zones."

That is the real tragedy, and that, ultimately, is what is at issue here. Complaints about the composition of the force are not really about the force, but about inequities in the larger society and the priorities of political leaders. The Bush administration was committed unequivocally to ending Iraq's siege of Kuwait, but seemed to equivocate about using more federal resources to help American neighborhoods that are under siege by Uzi-wielding drug dealers. The President, focused intently on a problem ten thousand miles away, seemed oblivious to homeless people sleeping in a park across the street from the White House.

The administration's deft handling of the Persian Gulf crisis actually served to accentuate its domestic policy deficiencies. During his inaugural address, President Bush insisted that the nation had the will, but not the wallet, to address pressing domestic problems. He found both the will and the wallet to set things right in Kuwait. Many Americans are wondering whether he can do the same thing on the home front.

CONCLUSION AND RECOMMENDATIONS

Operation Desert Shield/Desert Storm was the U.S. military's first major test in nearly two decades. One of the things it demonstrated is that, man for man and woman for woman, today's AVF is the finest military this nation has produced.

But that positive experience is not likely to silence those of us who believe, as a matter of principle, that there is something wrong with a society that allows its most privileged young men and women to avoid a basic citizenship responsibility.

Returning to conscription would not solve this problem, however. Assuming current conditions continue, the vast majority of enlistees still would be volunteers and blacks still would be more likely to volunteer than whites; so a draft would have little impact on the composition of the force. In any event, the real problem is not that we rely heavily on working class blacks and whites to defend the country; it is that those who have the most seem to contribute the least.

In recent weeks, the mass media have turned General Colin Powell and General Norman Schwarzkopf into heroes. These able

men richly deserve our admiration and gratitude. I hope that rank-and-file soldiers also receive the accolades -- and the concrete expressions of support -- that they deserve. Congress already has before it a number of proposals to expand benefits for Desert Storm veterans. I would add only three suggestions, none of which affects current laws or budgets.

First, hearings of this kind can be enormously beneficial and should take place again. If this discussion had occurred prior to the Persian Gulf crisis, perhaps fewer politicians would have run to the media with hastily considered ideas about returning to conscription. By revisiting the force composition question from time to time, the committee can keep the public informed and better able to cope with a future military crisis.

Second, this Committee may wish to ask whether the services are doing as much as they might to enhance the representation of blacks and other minorities in the officer corps. Blacks are heavily represented in the enlisted ranks, but only out of every twenty black service members is an officer; the comparable figure for whites is one in six. Some of the services are not doing at all well on this front. The Air Force, for example, experienced a decline in black officer accessions during the 1980s.

To the extent that officer production is a function of college affordability, this problem may be remediable. In this regard, the Committee may wish to examine the distribution of ROTC scholarships. The Committee also may wish to evaluate skills enhancement programs, such as the one that the Army has

offered for many years at historically black colleges and universities, to see whether they warrant expansion.

Third, as the services make reductions-in-force, they should be encouraged to work with the departments of Labor and Veterans Affairs to develop transition programs that help veterans prepare for the civilian labor force. Blacks might benefit especially from this, because they tend to be heavily represented in the routine administrative and support jobs that are likely to be most vulnerable during force reductions.

The military was the first major American institution to adopt and implement equal opportunity. Many of our civilian institutions have been slow to make such a commitment, and the results show in their work forces, especially at the managerial and executive levels. The Army had black officers commanding white soldiers in combat years before some of our universities entrusted black professors with the responsibility of teaching white undergraduates. It was not surprising that the Joint Chiefs of Staff had a black chairman before any Fortune 500 company had a black CEO or board chairman.

The composition of the all volunteer force is a positive reflection on the military, but a devastating commentary on our civilian institutions. It suggests that we have allowed our economy to reach a point where businesses can offer high school graduates little by way of long-term career opportunities. It also suggests that the color line remains a formidable barrier.

The CHAIRMAN. Thank you, Mr. Dorn.
Mr. Walters.

**STATEMENT OF RONALD WALTERS, PROFESSOR OF POLITICAL
SCIENCE, HOWARD UNIVERSITY**

Mr. WALTERS. Thank you very much, Mr. Chairman.

First, I want to thank you for having the African Americans here at the table when you are dealing with a topic that is as sensitive as the one that you are dealing with today. Very often, we are not at the table when these issues come up.

Second, I want to thank you for having a nondefense specialist at the table, and I plead ignorance on many of those issues, because what I would like to do is talk a bit broader about some of the issues that have been raised here today.

First of all, the question of disproportionate representation, I think, has been clearly established by the studies which have come out that people have already referenced, especially the CBO study. What I do in my presentation is to contain a number of statements from members of the Congressional Black Caucus, political leaders, black journalists, and others, with respect to this particular fact. What they were doing when they talked about the fact that blacks were represented in the military was evincing an anxiety about possible body counts and casualties, that blacks would suffer disproportionately in the event of a conflagration.

Now, having made that point, I want to say that I do differ with my colleague, Ed Dorn, because I am one of those who does believe that there is such a thing as economic conscription. I am really sort of taking a page from the book of Congressman John Conyers in this regard, but I am looking at the fact that, when you look at the range of choices available to African American youth, you have to come to the conclusion that, first of all, they are not as great as white youth similarly situated, and, second, they really are not as great as many of those youth who are not volunteering in the Army at all.

What I do in my presentation, of course, is, I allude to the question of the general status of black labor force participation and suggest that blacks have had access and been overrepresented in many of the jobs that require manual labor and very little skills; they have been underrepresented in those jobs that require technical proficiency in the civilian labor market.

The second thing I do here is that I look at one study that was done of the New York City major metropolitan area on labor force participation rates. What the study found—of course, it was done by Walter Stafford of the Community Services Society. What he found was that blacks were stacked up in a very few jobs in that area. If you looked at the entire range of occupations available in a major metropolitan area like New York, one found that blacks were not represented, not distributed, fairly throughout that range, they were stacked up in a few of those occupations.

In addition to that, he went on to look at the participation of blacks in the New York City government itself, and what he found, again, was, in looking at the full range of jobs in 66 agencies, that 75 percent of blacks were concentrated in 42 of them and that, of

course, they made less than \$25,000 a year, where the average was \$33,000 a year.

So there is very good evidence to suggest that blacks do not have as wide a range of choice as whites in general and that, for that reason, I think, my colleague Mr. Dorn's comment was appropriate, that if a young kid is thinking of either a fast food job or the military as a choice, then the military looks pretty good. One has to ask, though, why only that fast food job is available, and therein lies the problem.

Second, I would like to move on to the question of the impact of this problem upon the black community. I think the definition of "disproportionate representation" has been made essentially with respect to the numbers, the disproportionate numbers, blacks serving just over 20 percent of the American military, constituting 12 percent of the population.

There is another and far more profound, though, I think, definition of "disproportionate representation" which one has to take under consideration, and that is the implications of it. When someone volunteers for the military in the minority community, they are taken out of an already disadvantaged population. It may represent a net gain for the individual, but it may also represent a net loss in human resources for that community, a net loss for the human capital that is taken out and, therefore, a net loss for those individuals who are left behind.

It is, I think, axiomatic that, when one looks at the distribution of opportunities in the military, one sees a fairly narrow range of occupations and opportunities for things like economic development, self-improvement, and so forth. In the civilian sector, there is a far wider range, therefore, for many opportunities individuals have to serve their community and their Nation, and so, if we say that it is all right for blacks and other minorities to be disproportionately represented in the less productive sector of society, then we are making a statement about what we feel that human resource could do to those communities.

I would agree, therefore, with Professor Seymour Melman and Marion Anderson who look at this in economic terms, and they say quite pointedly that blacks are also especially hurt by high military spending. The analogy there is that the military is not the most productive sector of society, and therefore it is not a good use of human resource capital to concentrate it in that particular sector.

I suggest that there is a resource drain, therefore, that we are talking about here, and the resource drain is an important one when one considers that what people have said is true, and that is that the people who have been taken out of the black community are high skilled graduates of high school, people who ordinarily would go on to college and graduate and professional school and so forth, or at least these are people who could get the sort of jobs, I think, that would make it possible for them to support families.

So this is no light matter. I call this skimming. We are taking out of these communities, already disadvantaged communities, some people who are the most viable, and what we are leaving in those communities are people who are unviable in terms of the military service, and I think that what we are doing, therefore, is,

we are shifting the weight of the social responsibility because the military, of course, traditionally, in our community and other communities, was a place where we considered it to be a safety valve, and I think that has already been alluded to. Well, there now is no safety valve; that route of opportunity is blocked for those who, in terms of the armed forces examination, score in category 5; they are prohibited. These are also the individuals in our community who end up—one talked about drugs—on drugs; they end up incarcerated, over 400,000 of them.

Now one has a right to ask, is the military then, because of these changes in entrance requirements, contributing to the situation of blocked opportunity for the disadvantaged? and I would argue that they are and that there is a transfer of responsibility here that has gone on and that these communities are, in fact, paying the cost of that.

So the question of overrepresentation, it seems to me—and I won't talk about the arrest data or the educational problem we are having with black males today in our society—we are experiencing a veritable hemorrhage of black males, and so the question of human resource capital is really an urgent one in the black community.

I would like to move on to a few recommendations finally. First, I would say that, with respect to this problem of the All-Volunteer Force and the people coming back from the Persian Gulf, I think we have a responsibility to ensure that they come back to as viable a situation as possible. I would pass the civil rights bill of 1991 to protect the rights of those returning minorities and women in the work place. These are people who have to have a job. I think there is a relationship here between the people coming back and what they can expect in terms of protection from discrimination in the work place.

What I say in my presentation is that, regardless of whether or not the war was popular in the past, the black returning veterans have experienced a stagnation in their participation in the labor force when compared to whites.

Second, I would say that substantial attention ought to be paid to employment opportunities in the civilian sector, and here I would simply parrot what Ed Dorn has said; I think we ought to look at programs like JTPA and others and make it possible for people to have a very smooth transition, those individuals who served in the reserves to have smoother transitions back to their jobs as well. Some of those jobs, as somebody has already suggested, will not be available. What are we going to do about it?

Third, I would place additional emphasis on equalizing the training of minorities for technical jobs while they are already serving in the military. I looked at the recent data that was presented, and what I see is that there is some disparity between blacks and whites, for example, in the electronic skill occupations in the military. I won't go on with that, but I think more could be done to provide technical training for those minorities already in the service so that they will have greater opportunity should they decide to leave.

Fourth, I think educational organizations ought to advertize more vigorously. The minority communities are bombarded by mili-

tary advertisement. As somebody already has said it, they have been very skillful at recruiting and finding recruits. I see nothing like that on the education front, and it would be interesting to know what the comparative difference in the advertising budgets are between the Department of Defense and the Department of Education. I would think here, as the military downsizes, the military also has a stake in developing the kind of human capital that could meet some of the problems that we are facing out there in the future.

Fifth, the Congress should establish goal of proportionate participation in the military for minorities. I want to meet that issue head on, and I think that Mr. Bateman said it very early, that one of the few recourses you have to the problem of overrepresentation is to do something about it. He mentioned a quota.

Well, I think that there are ways to establish limitations and there are ways not to do it, and I think, for the purpose of argument and discussion, some of us have chosen the more inflammatory way to do it. But it is also true that the Congress has set all kinds of limitations on the nature of this volunteer force, and I think it could do the same thing if it takes seriously some of the points that one is making about the nature of the African American community today.

I present data showing that the top 10 contributing reserve units, for example, to the Persian Gulf conflict were taken inordinately from States with high black populations, and, therefore, if you don't do it on the basis of some theory to protect minorities, you perhaps could do it with respect to the concept of an impacted community, a community where recruits and volunteers and reservists are being taken with respect to a ratio which is much, much greater than other places in the country.

Finally, I say blacks should participate in the rebuilding of Kuwait. I won't press that, except for the fact that it was the subject of a discussion between some members of the Congressional Black Caucus and General Powell. They observed that, because of the disproportionate participation of blacks in the military and with respect to my argument that it takes human resources out of the community, and because of the fact that the DOD set-aside has been frustrated, that there ought to be an opportunity for blacks who have businesses to participate in this multi-billion-dollar enterprise.

Thank you very much.

PREPARED STATEMENT OF DR. RONALD WALTERS

INTRODUCTION

With the deployment of American troops to the Persian Gulf and during the preparations for war, many leaders in the Black Community observed that Blacks were disproportionately represented in the All Volunteer Military Force and consequently in the troops in the Persian Gulf. A simple definition of this concept holds that although Blacks constitute 12% of the national population, their percentage of the total of the military services is much greater. The action of members of the Congressional Black Caucus in overwhelmingly voting against the Congressional resolution authorizing the President to use force in pursuit of United Nations resolutions regarding the Persian Gulf, was reflected in the opinion polls indicating strong resistance within the national Black community to both the deployment of troops and the war. For example, in a New York Times/CBS poll released on January 22, only 47% of Blacks agreed that the United States was right to start military action. Comparatively, 80% of whites favored the war.(1)

The sentiments of Black poll respondents and leaders above were further confirmed at a forum on "African-American Responses to the Crisis in the Persian Gulf," on January 21 sponsored by my Department at Howard University, where statements were obtained from a wide variety of Black leaders - organization heads, professors, journalists and others. This body of opinion showed that Black leaders were unmistakably opposed to war based on a number of factors (most of which I will not discuss here), including the disproportionate presence of Blacks in the military, their participation in the Persian Gulf troop deployment, and the fact that they could comprise a disproportionate share of the war casualties. Typical statements are presented below:

--- Congressman Michael Espy (D-MS) says: "Black people fear their sons may be the first to die." (2)

--- "Donald Mc Henry, former U. S. Ambassador to the United Nations, said the first group of casualties in the Persian Gulf will probably be black and Hispanic." (3)

--- Congressman Major Owens (D-WY) said: "We will lose a lot of lives if we go to war, and it will be more of our people who will be the ones sent home in the body bags, just like it was in Vietnam." (4)

--- Congressman Craig Washington (D-TX): "American History reminds us that minorities and the poor have always fought our wars, and they have shed blood, lost their limbs, and given their lives in a ratio disproportionate to their numbers in society."(5)

--- "Blacks may be called on to pay a disproportionately high price if all-out war should erupt in the Persian Gulf." (6)

To begin with, it is indisputable that Blacks are over-represented in the U.S. military as a whole. This is clear from data presented in the CBO study, "Social Representation in the U.S. Military," (October 1989) and in the more recent GAO Study, "Composition of the Active Duty forces by Race or National Origin Identification and by Gender, (February 1991). These studies show that whereas Blacks constituted 11.1% of all active duty forces in 1972 (a proportion roughly similar to the total Black population) they grew to 22.3% in 1980, 19.7% in 1987, and 20.8% in 1990. Black women made up 30% of total DoD services in 1989 and 40% of the Army alone. (7)

Department of Defense figures show that as of January 3, 1991, 20.4% of the troops in the Desert Shield operation were African-American, comprising nearly one-third (29.8%) of total Army troops and nearly one-quarter (22.1%) of all Army combat troops. Women comprised approximately 6% of all troops in Desert Shield, with Black women constituting a roughly equal amount to their 40% presence in the military as a whole. (8)

Economic Conscription

Differences of opinion exists with respect to the reasons why Blacks are over-represented within the military. For example, President Bush said that Blacks enlisted in the military, "because they know it is a place of openness and true meritocracy and because they know that every serviceman and woman receives equal training and the finest training and equal treatment every step of the way." (9) This view was supported by General Colin Powell, Chairman of the Joint Chiefs of Staff, who "challenged the rest of this country to create the same paths of opportunity which we have in the military." (10)

On the other hand, Congressman John Conyers, said that the figures of over-representation of Blacks contained in the above-referenced GAO study (that he initially requested) amount to a pattern of "economic conscription" where Blacks turn to the military "for lack of opportunity in civilian life." (11) Also, while acknowledging the veracity of the President Bush's view, both Dr. Frenklyn Jenifer, President of Howard University and Wade Henderson, Director of the Washington, DC Branch of the NAACP, preferred that the opportunity provided by the military should be replicated in the civilian sector.

There is ample confirmation of the Conyers thesis in the data which illustrate the static nature of Black economic development and the narrow range of economic choices. In January 1991, the National Urban League released its Report, The State of Black

America. In this Report, the economic analysis of Dr. David Swinton was summarised as follows:

"Both in absolute terms and in comparison to white Americans, blacks have high unemployment rates, low rates of employment, inferior occupational distributions, and low wages and earnings. Blacks have low incomes and high poverty rates. They own little wealth and small amounts of business property. Second, no significant progress is being made to improve the status of blacks and to close the gaps. Thus, the disparities in all the above-mentioned measures of economic status have persisted at roughly the same level for the last two decades, and many indicators of inequality have even drifted upward during this period."(12)

This picture of the general economic situation of Blacks highlights their position in the labor force. Blacks have traditionally been overrepresented in the service and clerical occupations and under-represented in skilled craft, technical, and managerial and professional occupations.(13) With the recent downturn in the economy which has resulted in an increase in the unemployment rate to 14% for Blacks and the loss of an estimated one million jobs since the second quarter of 1990, many jobs even in the service and clerical sector of the economy are being lost. This led John Jacobs, President of the National Urban League, to suggest that even before this downturn, Blacks were in a "permanent recession."(14)

While Bush administration economists feel that the current recession will be short, Andrew Brimmer, Joseph McAlinden and others think that the "leading economic indicators" currently displays an economy which will continue to slowly decline, such that the modest gains made in the service and clerical sectors by Blacks over time, may be substantially reversed.(15)

The narrowness of the economic opportunity structure in general for Blacks is the main driving force behind the concept of "economic conscription", since because of it, young Blacks are forced to consider and select the often superior financial resources and career options available to them in the military. For example, a 1985 study of private sector employment available to minorities in the New York City metropolitan area by Walter Stafford, found that:

"...[minorities] are tightly concentrated in a narrow range of industries and occupations. Even in industries where they are represented proportionately, they have few avenues for upward mobility or access to decision-making authority."(16)

Then, in a follow-up study of the public sector employment of minorities in New York City government agencies, Stafford found a similar pattern. An estimated 73% of the total Black workforce in

New York City government was concentrated in 42 of 66 agencies, and the majority of Blacks earned less than \$25,000, or \$8,000 less than the norm of \$33,000 for all city employees.(17) Given this illustrative picture of the national black opportunity structure for employment, the worsening status of the general economy, will also act to further constrict the economic opportunities for Blacks, forcing even more to consider the military enlistment option.

Impact upon the Black Community

The question of the "disproportionate" representation of Blacks in the All Volunteer Force is important beyond the possibility that of disproportionate casualties. When minority males and females are taken out of an already disadvantaged population, it may represent a net gain for the individuals who are transferred into military service. However, this transfer may also represent a net loss of human capital for those left behind in their community. And although it is possible to argue that if they seek opportunity as individuals, they contribute fewer problems their original community, the relatively high educational level of Black military volunteers would not support this claim, because their role in the civilian sector has potentially far more immediate and tangible benefit for others than their military role. When mothers or fathers are deployed, families; and often when individuals volunteer, community institutions suffer.

In the civilian sector, however, they may participate as entrepreneurs, employing many people and enhancing economic development; they may become educators, helping to train many people in a variety of professions; they may become health professionals, inventors, service providers, etc., all helping to affect the circumstances of many thousands of people beyond themselves. The range of roles in the military are far fewer.

The logic of this view is close to that of analysts such as Professor Seymour Melman of Columbia University who considers the Defense budget as the largest capital budget in the government and makes the same case about its investment.(18) And it is also the same logic which led analysts Marion Anderson to assert that, "Blacks are also especially hurt through high military spending."(19)

Despite the creation of a resource drain, there are those who would agree with analysts Robert Pullinwidar who argues that any attempt to restrict the opportunity of Blacks to volunteer in the military service because of worries about their "victimisation" restricts them to one choice - unemployment.(20) However, the accuracy of this statement is highly questionable, especially since the military raised its enlistment requirements in the early 1980s and is attracting better educated Blacks. Data from the previously

cited CBO study indicates that because of the higher educational requirements of the current military, the percentage of Black high school graduates greater than whites both at enlistment and through six years of military service.(21) Furthermore, it should be noted that high school graduates in the 19-29 age cohort have traditionally maintained the highest labor force participation rates in both the Black and white communities.

Other observers argue that Blacks should be allowed to be over-represented on the basis of the preferred positive value of the U.S. maintaining a "representative military service". The problem this laissez-faire approach poses is that the individual choice which is promoted for Blacks works to the benefit of the military and the larger national interest and to the detriment of the Black community which loses the human resource. It is probably accurate to suggest that these human resources are irreplaceable.

Already, it might be suggested, the higher educational and APQT test score requirements have affected the Black community by leaving within it a larger pool of individuals who are both incapable of qualifying for military service and unviable in the civilian economy. The military has traditionally performed the function of a "safety-valve" for those individuals in the Black community (and other communities) who could not negotiate the established economy. Thus, the "skimming" affect of the military's enhanced entrance criteria might contribute indirectly to the blocked opportunities of those males who turn to illegal means of survival. Indeed, considerable research links the growth in unemployment to the growth in incarceration rates.(22) This factor, as well as the higher technological requirements in the general economy may contribute to the stability and growth of what has been termed the permanent Black "underclass".(23)

In Washington, DC for example, arrest records for 1987 indicate that 57% of those arrested for a variety of adult crimes are between the ages of 18-29.(24) Additionally, 30% of the homicide victims are in this same age cohort.(25) Given the very high incident of drug-related homicide within the Washington, DC community, currently standing at nearly 500 largely Black youthful male deaths per year, and the correlation of high incidents of low social class and poverty with such activity, a community violence intervention workshop made a series of recommendations which included the following:

"Developing job-search programs that place persons from high-risk groups in gainful employment that will allow for financial independence and growth opportunity."(26)

This data on the high rates of incarceration and arrest should be balanced against the alarming deterioration in the social status of the Black male in general. While Blacks have made some gains in

high school graduation rates, recent data indicates that "In 1989, 69.3% of African American females graduated from high school, compared with 72.2% of their white counterparts. (27) In that same year, the Report continued, "33.8% of African American women ages 18 to 24 were attending college, compared with 27.1% of African American men." (28) Put in national perspective, the 27% of Black male attending college should be seen against the 40% of white male high school graduates attending college in 1989. It should be noted that there is no appreciable gender gap between Hispanic male and female college enrollment rates.

Thus, disproportionate military service should be added to the additional losses of Black males in the civilian sector due to high rates of incarceration and homicide, and balanced against the consequent enrollment of males in high school, college, graduate school and professional school and their eventual contributions to the middle class. Thus, the 8% over-representation of Blacks in the military should be available for more productive investment in the socio-economic development of the African-American community.

The social function of the military cannot be denied, since many of those who enlisted were seeking social and economic opportunity and eventual upward mobility within society. In fact, the high rate of Black enlistment and mobility within the military is not only a comment upon the meritocracy of the military, but of the extent to which it has become an alternative social service program for disadvantaged portions of our population. It should be said that military service for Blacks has traditionally fulfilled a number of non-military objectives. In this sense, the phenomenon of "economic conscription" should be construed as the means to much larger social ends.

RECOMMENDATIONS

It is apparent that the All Volunteer military Force was shaped to achieve a high level of performance, given the increased technological demands of the modern military, but that in its social openness it has allowed a "brain drain" from the Black community in order to achieve national goals. Given the deterioration in the state of the Black community, it is logical to assert that it also has an interest in retaining highly qualified persons who will contribute to the individual and collective advancement of Blacks and that this can best be achieved in the civilian sector. Therefore, there needs to be a policy adopted which might more equitably achieve both the goals of the Black community, as expressed through its leadership, and those of the nation as well. The following recommendations are offered with this concept in mind.

1. Pass the Civil Rights Bill of 1991 to protect the workplace rights of those returning minority and women veterans.

History has shown that whether or the war was popular, returning Black veterans faced difficulties in establishing their place in the workforce, due in great part to employment discrimination. For example:

A. After World War II, the percent of Blacks in the Labor force declined from 38.1% in 1940, to 33.6% in 1950, to 33.3% in 1960, covering the Korean War as well.

B. After the Vietnam War, unemployment for Black Vietnam Veterans rose (20-24 year-olds) from 15.2% in 1970, to 21% in 1974. In that same year Black non-Veteran unemployment was 14.3%, white Vietnam Veterans was 9.6% and white non-Vietnam Veterans was 7.4. (29)

2. Substantial attention should be paid to employment opportunities in the civilian sector.

A. Now that it is certain that the soldiers who served in Europe will be returning as a result of the down-sizing of the military commitments in NATO, and others will be returning from the Persian Gulf, additional Federal financial resources should be applied to training for high tech jobs. This will require substantial additions to the JTPA.

B. Does the military have effective "bridging programs" for veterans? It has been traditional that despite veterans preference and other programs designed to give an advantage to veterans, white veterans have unusually had better access to employment in the corporate sector than Blacks.

3. Place additional emphasis on equalizing training of minorities for technical jobs while they are serving in the military.

The data on military occupation distribution shows a disparity between Blacks and whites employed in technical jobs. For example, for FY 1989, whites exceeded blacks as:

Electronic Equipment repairers - 13% to 6%, and

Electrical/Mechanical Equipment repairers - 24% to 16%.

Blacks still appear to be concentrated in the non-technical areas of Infantry, Gun Crew and Seamen; Communications specialists; Functional Support and Administration; and Service and Supply Handlers. (30)

4. Educational organizations should advertise more effectively, especially in minority communities.

Given the wide extent and effectiveness of advertisement by the military for enlistment, civilian organizations should advertise as

vigorously in the civilian sector to promote educational institutions and employment opportunities. Prominent forecast for future national manpower requirement in the civilian sector indicate that minorities will be a larger share of the workforce and will play a more strategic role in the nation's economic viability.(31) Thus conversion of military resources from Cold War should take into consideration the manpower training requirements of the civilian sector. The task of focusing American minority youth on educational opportunity is in the national interest and should be advertised as such. Thus, the advertising budget and techniques of the DoE should rival those of DoD.

5. The Congress should establish a goal of proportionate participation in the military for minorities.

One experience of the Persian Gulf that will warrant further legislation is the deployment of husband and wife in a situation where there are children. The corrective for this works to the advantage of the family unit. Equally important, as previously observed, the withdrawal of human resources from a disadvantaged community doubly weakens the family and community structure. So, inasmuch as the Congress established the limitations on the proportion of those who could be enlisted from the various categories of applicants passing the APQT, it could also develop a minority limitation criteria. Such a criteria would place a limitation on the number of enlistments that could be accepted from certain "economically impacted communities".

Alternatively, one might consider an "impacted community" criteria where the ratio of troops to population of those serving either in the Reserve or on Active Duty status is considerably high. A review of the troop deployment in the Persian Gulf by such criteria could be instructive. If one considers a sample of the top ten states where reservists were called to serve in the Persian Gulf, there is the following distribution:

Table 1. Top Ten States Contributing Reserve Units to The Persian Gulf Military Conflict, 1991 (1)

Rank/State	Number	Ratio/Pop	% BlkPop	PCI(2)
1. Mississippi	7,277	281	35	\$8,857 (83)
2. Wyoming	1,067	234	--	12,955 (85)
3. Louisiana	8,672	209	30	11,015 (85)
4. D.C.	871	144	67	6,129 (87)
5. Alabama	5,775	142	26	10,510 (85)
6. W. Dakota	860	135	--	13,034 (85)
7. S. Caroline	4,627	132	30	10,514 (85)
8. Tennessee	1,316	125	16	10,934 (85)
8. Utah	2,137	125	--	10,166 (85)
9. S. Dakota	842	121	--	11,207 (85)
10. Arkansas	2,710	116	16	10,180 (85)

1. Table, "Troops in the Gulf," The Omaha World Herald, cited in Michael York, "District's Gulf Call-up Rate High," The Washington Post, January 11, 1991, C1.) pci - per capita income

2. Census of Population, Bureau of the Census, U. S. Dept. of Commerce, 1985 Provisional estimates.

This table shows that 60% of the areas from which the reservists were drew contained heavy Black populations and per capita incomes well below the national average of \$12,900. The call-ups from these states also had the highest ratio of troops to population, meaning that certainly there was a disproportionate call-up of Black reservist to the general population.

6. I would oppose the re-institution of the universal draft since it would enhance the disproportionate representation of Blacks.

The re-institution of a draft would increase the numbers of Black males taken from the community significantly beyond the 400,000 who served between FY 1971 and FY 1990, and further deplete it of this resource of collage eligible youth, especially since the AVP

regulations have in place a prohibition of enlistment from those who score in Category V on the AFQT. The CBO Study on "Social Representation in the Military" indicates that: "Almost half of those in category V are black, so the draft-eligible population would underrepresent blacks and other minorities." (32) However, it would over-represent those in other categories.

A universal draft with only very exceptional deferments and no exemptions would equalize the distribution of recruits from all socio-economic classes and reduce the social impact upon the Black community due to blocked opportunities. The effect of blocked military opportunities should be borne by other parts of the federal budget, but the burden of training this population is increasingly passed on to state and local governments.

7. Blacks should participate in the re-building of Kuwait.

On February 25, a group of Black Congressmen met with General Colin Powell on the aftermath of the military action in the Persian Gulf and one of the subjects was the participation of Blacks in the reconstruction of Kuwait. No doubt, basing this position on the disproportionate participation of Blacks in the liberation of Kuwait, Congressman Mervyn Dymally, who presented this issue, said that General Powell had expressed the concern that the corporate sector should increase their hiring of minorities "who find they no longer have military jobs".(33)

Press reports indicate that contracts are currently being let with such American companies as Caterpillar, Motorola, American Telephone and Telegraph, General Motors, Raytheon, concerning the various operations involved in the re-building of Kuwait.(34) The writer estimated that 70% of 200 contracts had been signed worth more than \$800 million and that the eventual enterprises could cost as much as 80-100 billion.

Assurance that minority businessmen would have an opportunity to become involved in this giant economic development enterprise would be fair, especially inasmuch as the minority "set aside" provisions of the DOD budget, previously legislated, have never been properly enforced. Furthermore, this would help to provide a partial answer to the question posed above concerning the compensation for the disproportionate withdrawal of human resources from the Black community.

Conclusion

Traditionally many Black soldiers have been disappointed in their expectation that in exchange for their military service, somehow their lot and that of their people would be greatly improved, as reaffirmed by the sentiments of Donald Sanders, a

resident of the Robert Taylor Homes, a public housing project in Chicago, Ill.

"I am happy Gen. Colin Powell has been given the opportunity to lead. But I feel sorry for the brothers who are fighting over there. They are fighting to preserve the economic benefits of others and not for ourselves as Black people. We don't have any great economic leverage in America, because we don't own much property. When Black men and women return to the United States from Operation Desert Storm, nothing will have changed. They will receive a handshake, a pat on the back and they will be told there isn't anything else for them. When brothers go and fight a war, we don't get recognition. We don't have ceremonies to honor black men. We have to dig deep to find the names of the men who fought in the war."(35)

These recommendations are offered in the hope that this time something will change.

ENDNOTES

1. Adam Clymer, "Poll Finds Deep Backing While Optimism Fades," The New York Times, January 22, 1991.
2. Wall Street Journal, August 22, 1990, p. A10.
3. The Capitol Spotlight, Washington, DC, November 15, 1990.
4. Ed. Wiley, "threat of Gulf War Re-Ignites Concern of Disproportionate Representation of Blacks in Military," Black Issues in Higher Education, December 20, 1990, p. 16.
5. "Crisis in the Gulf: African-American Responses", January 21, 1991.
6. Hugh Hewlton, "Blacks in the Gulf: A Disproportionate Sacrifice," The City Sun, New York City, January 16-22, 1991, p. 4.
7. Social Representation in the U.S. Military, Congressional Budget Office. U.S. Congress, October 1989. Also, "Composition of the Active duty Forces by Race or National Origin Identification and by Gender," United States General Accounting Office, February 1991.
8. Fact Sheet, Desert Shield #153, January 3, 1991.
9. Ann Devroy, "Bush Calls Military a Path of Equal Opportunity," The Washington Post, February 26, 1991, p. 1.
10. Ibid.
11. Ibid.
12. The State of Black America 1991, National Urban League, New York, N. Y., 1991, p. 25.
13. Statistical Abstract of the United States, 1987, 107th Edition, Bureau of Labor Statistics, 1988, pp. 385-386.
14. "State of Black American 1991 Prepares African Americans for 21st Century: Urban League Releases State of Black America 1991 Report," News Release, National Urban League, January 8, 1991.
15. Johnathon Hicks, "Purchasers' Index Posts Small Gains," The New York Times, March 2, 1991, p. 32.

16. Walter Stefford, Closed Labor Markets: Underrepresentation of Blacks, Hispanics and Women in New York City's Core Industries and Jobs, Community Service Society, New York, 1983.
17. Walter Stefford, Employment Segmentation in New York City Municipal Agencies, CSS Institute for Community Empowerment, 1989, p. vii.
18. Ronald Dellums, Defense Sane: The Search for a Rational Military Policy, Bellinger, Cambridge, 1983, pp. 162-170.
19. Ibid, p. 195.
20. Social Representation in the U.S. Military, CBO, op. cit. p. 9.
21. Ibid. pp. 63-65.
22. Economists Meyers and Sebel say that "for the North this relationship is beyond dispute." See, Samuel Meyers, Jr. and William Sebel, "Unemployment and Racial Differences in Imprisonment," Review of Black Political Economy, Vol. 16, Nos. 1 & 2, Summer-Fall 1987, p.207.
23. William J. Wilson, The Truly Disadvantaged: The Inner City, The Underclass and Public Policy, The University of Chicago Press, Chicago, Ill., 1987.
24. Crime & Justice Report for the District of Columbia, Office of Criminal Justice Plans and Analysis, Government of the District of Columbia, pp.16.
25. Homicide in the District of Columbia, Office of Criminal Justice Plans and Analysis, Government of the District of Columbia, 1988, p. 8.
26. Ibid, p. 8.
27. "Minorities in Higher Education," American Council on Education, Washington, DC, 1990, p. 1.
28. Ibid, p. 3.
29. The Social and Economic Status of the Black Population in the United States, Bureau of Census, U.S. Dept. Commerce, Washington, DC, 1990-1978, Table 41, p. 64; and the 1975 edition, Table 41, p. 67.
30. Population Representation in the Military Services, Fiscal Year 1990, Office of the Assistant Secretary of Defense, Force Management and Personnel, July 1990, Table 2A, p. 73.

31. Workforce 2000: Work and Workers for the 21st Century, Hudson Institute, Indianapolis Indiana, June 1987.
32. Social Representation in the U.S. Military, op. cit., p. 77.
33. J. Jennings Moss, "Black Caucus Salutes Powell," The Washington Times, February 27, 1991.
34. Steve Lohr, "U.S. Corporations Win Kuwait Rebuilding Jobs," The New York Times, February 28, 1991, p. A11.
35. "Blacka Question Gulf War," NorthStar News and Analysis, January 1991, p. 4.

The CHAIRMAN. Thank you, Mr. Walters, and thanks to all of you.

Let me ask anybody on the panel who would like to take a try at it the question I asked Bob Hale before. Help me understand why it is different in the black community and in the Hispanic community.

I mean here we have a volunteer force which attracts a disproportionate number of blacks, maybe 50 percent greater than they are in the population as a whole, and yet among the Hispanic community it doesn't attract an equal proportion; they are about 50 percent or half, in the Army compared to what they are in the population as a whole.

What is the difference in the black and the Hispanic community here? I mean Bob Hale's explanation for why it is attractive for blacks ought to apply also to Hispanics; it is an opportunity that isn't otherwise there; in the community from which they come. The civilian economy doesn't offer many other alternatives. All of that is certainly true and is said about why there is a disproportionate number of blacks, but why shouldn't that also then apply to Hispanics?

Mr. WALTERS. First of all, I think Mrs. Byron got a lot of it right. I think that when you look at the deployment of military recruiters in the black community, you can't go very far without running into them. But I think that there are also some other things here.

I think, first of all, if you look at the Hispanic population, you have a situation where the Hispanic population has large numbers, but those numbers have not translated into a number of areas—for example, voting. Many members of the Hispanic community right here in this town, other towns, have come in as immigrants, but they really have not assimilated yet, and it is true, of course, that they are in a very small number of places in society compared to the black population, which is large.

There is something else, and that is the feeder system. The Hispanic community does not have the kinds of institutions through which you could actually recruit. The black community has 107 colleges alone, and many of those colleges and universities have ROTC programs, have had them for a long, long time, and they constitute a natural, continuous base of recruitment into the military services.

The other thing, of course, is that in many of the Hispanic communities—and when you say "Hispanic," what you have to do is to disaggregate it in socioeconomic terms, because some areas of the Hispanic community are far more well off than blacks socioeconomically, which means that their profile is very much like the white upper or middle class profile, not the black profile.

So you can only compare those segments of the Hispanic community with the similarly situated socioeconomic aspect of the black community, and there you have a much larger problem.

The CHAIRMAN. Mr. Dorn, you had some thoughts?

Mr. DORN. Mr. Chairman, I have wondered about the same question, and all I can say is that some of the speculation so far, particularly Mrs. Byron's suggestion that an overlay of the geographic distribution of recruiters with the geographic distribution of the Hispanic population would probably look a bit different than if one

did the same overlay with blacks. But, other than that, all I can do is recommend that the committee raise the question and try to elicit a systematic response to it.

There may be Hispanic organizations that have talked to it, although in a recent conversation with representatives of the Southwest Voter Registration Project I discovered that they were as confused as we are about the actual reasons. It is an interesting question. It clearly, however, suggests that more is at issue in recruiting than economic incentives.

Mr. BANDOW. If I could just surmise a couple of things, which I can't prove. One, it strikes me, because of both language and the role of immigration for Hispanics, that perhaps Hispanics feel somewhat less integrated culturally with the rest of the Nation, so they are not quite in the same sense of mainstream, especially a concern for language in joining the force.

The second: It strikes me that, based on the history of segregation and the role of the military as an early institution in the Federal Government of trying to desegregate, there is a long heritage of the black community viewing the military as a way out. I mean Charlie Moskos has written very eloquently on how the military is a vehicle for equal opportunity. I don't think you have that same sense in the Hispanic community. So you have young blacks who grow up today who view is, kind of naturally, of the military as an option, where I suspect you probably don't have that same sense in the Hispanic community, where you can say, "My father, my uncle, and my grandfather were also in the military."

I would throw those out as possibility, but I have no evidence that I can offer.

Mr. DORN. I should mention, Mr. Chairman, that one also needs to look very carefully at the distribution of Hispanics within the military. Last time I looked, for example, in the Army Hispanics were very prominently represented in the so-called elite organizations, such as the 82nd Airborne. I notice from the Desert Storm data that roughly 8 percent of the Marine contingent in the Persian Gulf is Hispanic. Overall, however, Hispanic representation in the force is only about 5 percent.

So one may find odd distributions—not odd distributions; that is an unfair choice of words. One may need to look not just at the overall representation but at the types of military organizations that seem most appealing to Hispanics.

I note, in addition, that a large percentage of Hispanics live in the southwestern States, which is, of course, where many of our Air Force bases are located, but, as Ron Walters mentioned earlier, the Air Force does not have quite the same recruiting strategy as the Army. The Army, to go further on what Ron said, has long had a recruiting strategy that reaches not just into historically black colleges and universities but also into high schools. The Air Force's recruiting strategy has long been very different from that. Again, we are back to a more elaborate version of Mrs. Byron's early explanation, which is that recruiters are where Hispanics ain't.

Mr. WALTERS. Just to add a brief point on it, I heard the other day that Hispanics had traditionally gone into the Navy, and this would also comport with the sort of demographic composition of where they happen to be and the fact that the Navy also has not

traditionally had a very strong and aggressive recruiting posture where minorities were concerned.

The CHAIRMAN. Do other Members want to ask questions? I have some more.

Martin.

Mr. LANCASTER. Thank you, Mr. Chairman.

I guess, more than anything, mine might be more of a statement reacting to some of the testimony and then their reacting back to it.

I think when we talk about distribution, saying that the distribution between whites in the officer corps and blacks in the officer corps is one to six versus one to 20, we might also want to look at a distribution within management and labor in the civilian work force. I wonder if it is the same or if it is different and which is better.

I think you may find once again that the military performs better than the civilian employment picture and that the employment/management/labor distribution might be more favorable in the military than it is in the civilian work force.

I think the same would be true in college statistics. I think you might very well find that the distribution between black and white is more favorable in the military than it is in the colleges, and that then would explain the distribution difference in the officer corps, of course, which draws from a pool of officer-trained personnel.

So I think for us to say that because the distribution is off between black and white in the military, there should be some criticism. My guess is it may be a cause for praise rather than criticism.

The same is true with the range of choice in civilian employment. Although I was unfortunately detained and was not here for the CBO testimony, I think it was their testimony that, actually, blacks are disproportionately represented in the technical field and underrepresented in combat arms fields, and that, once again, we have a situation where the choices in the military may outstrip those available in the civilian community. So I think there may be reasons here why we should be praising the military rather than being critical.

Mr. Walters, you talked about skimming, and perhaps you have a point at least for younger black persons. But I come from an area of the country where a large number of retired military have chosen to come back to live, and I certainly would say that the retired military, especially minority or African American retired military, are making tremendous contributions in the community. They have had the experience and are now having the additional economic advantages of a very attractive retirement system, and are coming back home now and making significant contributions as community leaders and as sources of capital for development of minority businesses. You have minority personnel who have spent 20 years in the military come back home now at age 37 or 43 with the ability, because of their retirement, to leverage significant resources in establishing businesses and putting other African Americans to work. So while it may seem that it is skimming, I think it really is preparation for a better life in the black community, be-

cause these people then come back and provide a level of community service and leadership that they might not have otherwise.

Then, Mr. Walters, something you said really concerns me, and that is that we should have proportionate representation between blacks and whites in the military. Do you mean you are going to deny these opportunities to African Americans who want to go in the military so that we can achieve some balance? Because it is a volunteer service, and the only way you are going to get proportionality, it would appear to me, is to have a larger military and hold black accessions level and, for some reason, bring in more whites to do God knows what. I think that really is a very dangerous proposal, to say that we want proportionality even if that means denying an opportunity to African American young people that they now have.

One last point. You indicate, Mr. Walters, that reserve units came from States that have disproportionately high minority populations. I certainly don't think those units were chosen because those States have high minority populations. I think, again, it is a mark of pride, because I come from one of those southern States, that has higher proportions of African Americans in their population, and simply performs better. These States have more outstanding reserve and Guard units that the military wanted to call to active duty because of the very fine black and white makeup of the units. These units have trained well together, perform well, and could get the job done. I think that African Americans in those States are proud of the role that they are playing in Guard and reserve units, and it certainly was not seen as any reflection against those States because their units were chosen. Certainly they were not chosen in any way because those States have high African American populations.

Anyone can respond to that, if you would like, or you can just say, "Well, he said his speech," and move on to the next question.

Mr. DORN. Mr. Lancaster, I want to begin by thanking you for making a very important qualification. When I talked about the need to enhance opportunities in the military, I neglected to mention context, which is that I think the military can continue the substantial lead it has always had in this area. I think you are right on point. We should not at all be surprised that the armed services had a black chairman of the Joint Chiefs before any Fortune 500 company had a black chief executive officer. The services are just that far ahead of civilian society and particularly far ahead of our major corporations in recruiting blacks and other minorities and women, incidentally, into positions of leadership.

You alluded to the distribution of blacks within Desert Shield. The data I have suggest that blacks represented roughly 25 percent of all U.S. forces deployed in the Persian Gulf region but roughly 22 percent of the U.S. personnel assigned to combat units. However, the choice here is not between combat units and more technical units; rather, one must think of a three-part breakdown between combat, the more technical services, and the sort of routine administration and support.

What appears to happen is that black Americans, who tend not to score terribly well on standardized tests, tend to wind up disproportionately in the routine service and administrative support jobs.

One reason for that is that the services, at least since Vietnam, have been very worried about an overrepresentation of blacks and other minorities in the combat units.

Now there are ramifications here for a reduction in force, because during a reduction in force the services tend to cut their tail more than their teeth. That is, most of the reductions tend to be in those routine service and administrative support categories in which blacks and probably women are very heavily represented. We don't, of course, know exactly how the services are going to effect those cuts, but that is one possibility.

Mr. WALTERS. As the son of a retired warrant officer, of course, I am acutely aware of the role of the military in providing opportunity to blacks. But I am not one of those who is really sort of pounding his chest with pride, because I think we ought to have, rather than too much pride, also a little chagrin that the military is one of the few places in this society where this level of opportunity is accorded blacks. That is a problem, because this is also the place that you make the most outlandish sacrifice, and that is with your life.

Mr. LANCASTER. But I think then that we should be criticizing the civilian work force rather than being critical of the military.

Mr. WALTERS. I think we ought to criticize both of them.

Mr. LANCASTER. I think that here what we have had over the last 2 months is unfair criticism of the military without focusing on where the problem is, and the problem is not with the military, because the military has performed very well. What we should be criticizing is the civilian workforce for not providing equal or better opportunities for African Americans so that they would choose those fields in proportion to the choices that they are now making in the military, and I think that our criticism of the military is simply misdirected.

Mr. WALTERS. Let me then observe with respect to your second point on the question of quotas—and I think we really ought to be fair about this—the military has already established a quota for blacks by adjusting the test scores, and you can do that; that is not very difficult to do, and the military has done it.

If we are really serious about this question of quotas and the kind of people that we are taking out of the African American community, we would have to throw out these test scores, because you can adjust them in such a way that you can limit not only the number of people who qualify for entry but the kind of people who qualify for entry. So I think we just ought to be honest about this question of quotas.

So I am suggesting that you could do the same thing about it. You could say, "Well, we are taking a lot of people out of the minority community, particularly blacks, and we can further adjust these test scores in order to account for it." We could establish a criterion, an impacted community criterion, which would say that, up to a certain point, we won't take that human capital away from those communities. Rather, the future demands that since minorities are going to play an inordinate role in the workforce in this country and therefore in our global competitiveness and our national security, we are going to put the emphasis as a Nation not on military service and disproportionate representation there but

in education and in other roles that are going to be far more productive and far more salutary to the future of this Nation.

So I would think that here, in terms of the national interest, we have a responsibility not just in sort of beating ourselves on the back and saying how great this is, but I think we ought to look at the costs, and every time you drive these streets in Washington, D.C., you ought to think about that cost in human capital and where it is being directed, and the same thing with many of the other cities in this country. You ought to think about the murders and the drug epidemics that are happening and the fact that many of these kids, because of the laws that you have set, cannot get into the military like they could when I was a kid coming along. The military benefited a lot of my compatriots, but that is not available to these kids.

So I am saying there is a responsibility here, there has been a transfer of responsibility, and the question is, who is going to take it up?

Mr. LANCASTER. But, Mr. Walters, if you buy that argument, then you are going to do one of two things; you either are going to deny African Americans of ability the opportunity to come in the military so that you can bring in those who are less able and have less to contribute but perhaps who can benefit more by the training opportunities. Or you are going to have even more African Americans in the military because you are going to continue to make the opportunities available to those of greater ability and bring in even more of lesser ability so that they can get the training benefits. So which is it going to be?

Mr. WALTERS. I have already suggested it, because I think you are already discriminating against African Americans; that is patent; I think that is obvious. What we are discussing here is the question of the fairness of it, and you have two perspectives very clearly. You have one perspective which argues from the standpoint and perspective of the national interest. What I am suggesting is that that is not the only perspective; fairness demands a balanced perspective, and that is, what is happening to these communities? Where would we rather our high school graduates go? That is the question. Would we rather that they go to the military disproportionately, or would we rather that society see it in its interest to go in other directions that are far more productive?

Now the techniques of how you do that, it seems to me, can be worked out, but I would suggest to you that that really is the question: Where would we like to see our human capital invested? and I, for one, would certainly not like to see it disproportionately invested in the military.

Mrs. BYRON. Mr. Chairman.

The CHAIRMAN. But let others comment on the series raised by Martin, if they would like.

Mr. BANDOW. Yes, I would like to make a very quick point. I share the disquiet at the notion of trying to create a quota system. I don't think it is fair to say the military adjusted its test scores in the early eighties for the purpose of limiting the access of blacks. I mean the military had gone through a very bad period in the late seventies/early, like 1980, where it had taken in a lot of folks who were in category 4, received a lot of criticism; folks in the military

had not done very well in military competition; we had the problems that Mrs. Byron talked about in terms of training manuals; there was a very real concern over quality. What the military did was say, "We want top quality people to man the military, so we are going to adjust our scores accordingly."

I am very concerned about a system where it strikes me that, through a quota system, you would be telling qualified blacks that they cannot join because of their race. It is hard for me to see a more destructive signal to send to poor kids who want to come up and want opportunity than to tell them, because of their race, we have decided, for social representation factors, they cannot join, and I don't understand exactly what the quota would be, what Mr. Walters mean. It would either be, I take it, that we would deny the military quality people, which I think is a real problem. The military serves a very important role in this world, and I think we want a top quality military, and I hesitate denying the military top quality people. The notion that we should bring in less qualified people in the hopes that we can train them could have a very adverse impact not only on our overall national security but also on the other folks in the service. People in the service want to serve with the people who are best, who, in an operation like Desert Storm, will do the best, and if you start playing around with the numbers I think if you will have a very real obligation to people who joined to give them the best quality people necessary.

I do think that we have a very large social agenda; I mean the problem of an educational system that does not teach, a problem of a drug culture that takes over the inner cities, a problem of collapsing family and community structures, racism, regulatory barriers to opportunity; I mean there is a whole host of issues out there. I think the problem we see here is a larger social one, it is not a problem of the military, it is a problem of a society that does not offer enough opportunities to its black citizens, a very serious problem, but it is not one that I see how we can address through jiggering with the scores.

Mr. WALTERS. I disagree that this is only a problem with the military, because, in fact, the point I am making here is that the military really not only does bear a social responsibility but, in large part, has become a social service program in many areas, and, if it were not, then you wouldn't have a lot of these very nice accoutrements that you have in terms of veterans' benefits, and health benefits, and on and on and on. So the narrowness with which these comments were made, I think, simply aren't accurate. The military has a social responsibility, it has a very large social role when it is not fighting; fighting is not the only thing it does, obviously.

So I think that there is a responsibility here. I would repeat, there already is a quota. It is not something that you established; you mess with the scores, you create—and I find it very difficult, given the acumen of the presentations that have been made here about the kind of military that you can get by adjusting scores, that the military did not know that if you adjusted the scores a certain way that you would get a certain percentage of blacks. I find that very difficult, because their scores are available. These are not the first.

The last decade between 1980 and 1990 certainly isn't the only decade in which we have had tests, military tests. We know what sorts of pools are out there in terms of people who complete these tests. So now I am expected to believe that the military did not know what the potential racial composition of the military would have been if it adjusted the test scores one way as opposed to another, and that is very difficult for me to believe, Mr. Chairman.

Mr. BATEMAN. Mr. Chairman.

The CHAIRMAN. Mr. Dorn.

Mr. DORN. Well, I will defer to Mr. Bateman, Mr. Chairman.

Mr. BATEMAN. Mr. Chairman, I hate to butt into this, but I think this is an incredible philosophical error that Mr. Walters presents to us. He is, in effect, telling us that if the military doesn't adjust its testing criteria, the nature of its tests, in order to accomplish a racial agenda, that it is disserving the United States and the society that we, hopefully, aspire to become.

Quite frankly, I don't think we solve the social problems of this Nation, which are our most grievous problem, by an approach that says Government must select what it does, how it acts, and how it reacts to advantage someone on account of their race. What this society cries out for is a society where race doesn't make the difference, and until and unless we do that, we are going to be doomed to social evils and problems that are not going to get better, as all of us must fervently hope. They are really going to become worse, and what is very, very disturbing to me is that progress made over a period of 25 years, I think, has begun to recede to where perhaps the society may be becoming more racist rather than less racist.

But when we put it in the context of what are the civil rights and liberties of the people of the United States when the Government formulates its policies based upon the color of someone's skin, it has diminished the civil rights and liberties of all of the people of America, not enhanced those of any.

Mr. DORN. Mr. Chairman, if I may comment on three of the matters raised, first, clearly, the military understands very clearly what happens when one alters test score requirements, has known for a long time, and, as you will recall, Mr. Chairman, not from your personal experience but from studying these matters, one of the conditions under which a former Secretary of the Army agreed in 1950 to eliminate racial quotas and to desegregate the Army was that he could then use those test scores to control black enlistments if he found that necessary. President Truman, as you know, approved that approach.

However—however, one would be hard pressed to find concrete evidence that the military has used test scores in that way in recent decades. Certainly in the late sixties/1970's the NAACP tried very hard to find that evidence. I am not sure that it succeeded in doing so. Further, the adjustments in test scores toward the end of the 1970's were absolutely essential for a variety of reasons. One, of course, was to affect the quality; the other, as you know, Mr. Chairman, was to correct some misnorming.

On the military social role, it is clearly true, any institution that has three million people is going to have an important social role. However, one of the ways the military has succeeded in desegregating itself effectively and in achieving any number of other useful

purposes was by describing those purposes under the rubric of military necessity, not under the rubric of doing good, and I suspect that any future progress will also occur under that rubric of military necessity. It is a lesson, incidentally, that other American institutions might take heed of.

Third, on this question of military danger, obviously, the American military is the only institution in which young men and, if it comes to it, young women can be compelled to make the ultimate sacrifice. On the other hand, in saying that, we often overlook the fact that most of the time the U.S. military is not at war, and even when the U.S. military is at war, only a very small percentage of military personnel are exposed to combat danger.

One of my colleagues at Brookings developed a worst case scenario which projected that in a sustained ground conflict with Iraq the United States could experience as many as 16,000 casualties, 4,000 of whom would die. Now that, of course, is a worst case scenario. We are all very grateful that we came nowhere close to that. However, the apposite point to make about those numbers is that that figure, 4,000 fatalities, is less than 1 percent of all U.S. forces deployed in the Persian Gulf and a minuscule proportion of the 3,000,000 men and women under arms.

The ironic and tragic fact is that a young black man in one of our drug-infested inner city areas is almost at as great a risk of bodily harm as a black soldier in the Persian Gulf. It is that contrast which, if I may be so presumptuous, which I think Professor Walters is trying to draw our attention to, and, again, to support Mr. Bateman and other members of this committee, therefore, the issue is not really the military, the issue is those inequities in the rest of the society which our political leaders have done such a miserably poor job of addressing in recent years.

The CHAIRMAN. Beverly.

Mrs. BYRON. Mr. Chairman, thank you.

I was going to try to avoid getting back into this discussion, but there are a few points that I think have to be made.

First of all, this country was founded on giving people an opportunity. In some areas, we were slower than we should have been. But I don't think there is any question that today a young black or Hispanic in the military has opportunity.

I, too, talked to the Black Caucus last year, on grave concerns as we are drawing down our total force structure, and what kind of an impact it is going to have on the black community when there are going to be fewer places within our military family for opportunities for the young blacks.

Mr. Lancaster brought up a point that I think is so well taken, and that is the black military retiree who is back in his community as an owner of a small business, a shopkeeper, a role model in that community for other young blacks who are looking for a future.

I have a rural district, and I have talked to the sheriffs and the local police departments in my district, as I was concerned last year when we were drawing down the number in the military.

It seems to me that my local sheriff's department is going to certainly be much more inclined to hire a young person out of the service who has training in an MP company rather than a young person who has just gotten out of a high school environment. It

seems to me that the local communications—the phone company or whatever—is going to be much more inclined to hire a young person who has just come out of the military with communications expertise he acquired in the military. It seems to me that a trucking company is going to be a lot more inclined to hire a young driver for their heavy trucks and equipment who has come out of the military with that type of capability and training.

So I think when we talk about the young people we have in the service who are getting professional experience, and, when they come out, they have a marketable skill.

Mr. Walters, you talked a little bit about adjusting the scores on one hand. I couldn't exactly figure out whether you were talking about adjusting the scores to increase the numbers of blacks in the military or adjusting the scores to decrease the numbers of blacks in the military. At first, I thought you were concerned that we were adjusting the scores to preclude blacks from coming into the military. But then later on in your testimony, it seemed to me that you were concerned about adjusting the scores so there would be fewer blacks who would have an opportunity, or, do we have too many blacks who are currently in the service? I really couldn't quite get the bottom line on your concern about adjusting the scores.

I think many of the blacks that we have in the service are outstanding role models. I have seen them come back with great pride to their local high schools in their uniforms. They probably are the best advertisement for the recruiting force that we have within the service.

I also have seen a number of Hispanics and, yes, an area that we haven't talked at all about today, and that is the Asians. There are large pockets of Asian communities developing in this country, and we are beginning to see a number of Asians from various groups throughout this country who are in our military.

So I think we have a military in an all-volunteer force that is one with a great deal of professionalism about it and one that many of the young people in local communities, whether they are inner city black communities or whether they are rural farm communities or Hispanic communities, go off into the service and come back with their heads held high because they have training and they have learned what the military is so good at, and that is discipline.

So I think this all-volunteer force that we have today has certainly been one that I would like to see continue, because young people in the schools, the first question they ask me—and I have talked to a lot of high schools lately—is: "Are we going to have a draft again?" I have looked at them, and I have assured them that, in my estimation, we will not have a draft again. You hear a great sigh of relief in the classroom, but you also have numbers of people that come up to you afterward and say, "I want to go volunteer and serve."

Thank you, Mr. Chairman.

Mr. WALTERS. Well, Mrs. Byron, I really wish that I could share your optimism. You have said a number of things that were extremely optimistic, and I really hope that they come true. But I would really ask you this. You said it seemed to you that these

people would be hired. The hard, cold figures indicate that blacks, once they have demobilized, have had difficulty in employment, and I haven't cited them to you, but I could, they are here in my testimony, and so I would really ask, what assurances do you have rather than it simply seems to you that these people, in fact, are going to be hired? I think that unless this committee or some combination of people in Congress uses its influences this time around more vigorously with the President to have a civil rights bill, an anti-discrimination bill, that will protect work place rights, unless the military assumes a more vigorous role of developing transition programs and bridging programs so that people do make successful transitions out to civilian life, I am not so sure that it is going to happen simply by virtue of the fact of good anecdotal material.

Mrs. BYRON. We have a large number of women currently in the service, and, as we drawdown, we need to make sure that they are not discriminated against as they come back into the workforce.

Mr. WALTERS. Exactly. So I would ask—I mean I haven't really heard what the plans are yet for these things to happen, but I would hope that this committee takes it upon itself to deal with blacks, and Hispanics, and Asians, and women, and all of these people who are likely to have a desperate time fitting into this workforce, especially now that the economy is in a downturn.

Finally, I would say that I have tried to be very clear in my testimony about this question of test scores. Where I think we begin to use them to interpret a policy was that people were suggesting, "Well, if you are opposed to overrepresentation of blacks, how would you fix it?" and I suggested that one way you could fix it is the way you have already fixed it, and that is to use the test scores to fix it. So that is the bottom line.

What I was trying to observe was the fact that, because of the current situation, there has been a build-up in the black community of a certain population of young black males who are at risk and that, because of the military's action, I think it is implicit in that problem. But if you ask me, "Are you against overrepresentation of minorities?" I would say yes, I am against the overrepresentation of minorities in the military. How would you fix it?

Someone suggested, "Well, what would you do? Would you tell a person that they couldn't serve because of their race?" I tried to say no, that is not what you are doing now. What you are doing now is, you are manipulating the test scores to get a certain result. So I have suggested that you could further manipulate the test scores to achieve perhaps a lower participation of blacks and so lower participation of blacks.

So what I have said has really not cast any aspersions on the people who are serving—

Mrs. BYRON. But then isn't that discriminating against the blacks?

Mr. WALTERS. Could I just finish this point, and then I will listen to you.

What I am not trying to do is to cast any aspersion on the people who have served with pride in the military. What I am trying to say is that, if you look beyond the military, there are far more urgent priorities out there, and I think the military has a role in helping the society to address them. That is all I am trying to say.

The CHAIRMAN. Thank you, Mr. Walters.

Let me just jump in on the thing a little bit. I think what you are saying is correct, that the way that they did proceed. As you look over here on Bob Hale's chart, in 1980 the Army had 30 percent blacks in the enlisted recruits, and in 1989 it had 26 percent blacks. How did they do that? I don't know. "Manipulating the test scores" is not the way I would say it. What they did do was to increase the standards. You had higher pay and other things, so you had higher quality people apply. You just raised the standards, and when you raised the standards you insisted on high school graduates and, sure enough, what you did was eliminate, as you said, a number of people who, when you were a young man, could have joined the service and are now prevented from joining the service.

I am sure that is correct: If you wanted to reduce the number of blacks, you could raise the standards again, and you would probably find that the number of blacks would go down. My guess is, you would have a chance to do that, and one of the things that is going to come out of this is that the military is going to be very popular. A lot of people are going to line up at the recruiting office. You couple that with the fact that you don't have to recruit as many because the size of the Army is going down, and we may be going into a downturn on the economy. The whole military is going to be able to be extraordinarily selective in the short term. I think one of the things that is going to come out of this is, is that they are going to be able to be extraordinarily picky.

My guess is that in the next few months you are going to see a drop in the number of blacks just because they can be picky. They won't pick based on race, they will just pick based on other factors, and if you just pick high school graduates and high quality folks, you are going to get a higher percentage of blacks.

Bob.

Mr. HALE. So far, we don't see that in their plans. For 1992 and 1993, the mix of high school graduates in the so-called test categories I to IIIA—or the top half—stays about the same. Now they may do it.

The CHAIRMAN. Of course, it is pretty high. What are they? They are about 95 percent high school graduates now.

Mr. HALE. Before you do it, if you wanted to, you would raise the minimum test score and that would change that number. So far, there are no indications that they have that in mind. Of course, they were also in the middle of fighting a war while they were putting those plans together. I don't think any final decisions have been made.

The CHAIRMAN. Probably they haven't factored in the stunning victory yet in their plans. Wait until they figure out what that means in the number of people. Lots of folks are willing to go out there and pound up on Saddam Hussein if it doesn't mean losing their life; that looks like a lot of fun.

Mr. BANDOW. Mr. Chairman, we see that a little bit from 1989 to 1990. I mean the percentage of blacks in the number of recruits dropped from 22 to 21 percent. The percentage of high school graduates went from 91 to 95 percent. The percentage of those in the top three went from 96 to 97 percent. Indeed, the last half of the year really carried the first half of the year. We saw an increase

for the whole year for 1990. So we are seeing that a little bit at the end of last year.

The CHAIRMAN. Let me ask one other question, and then, if no one else has one; we will quit.

Talk to me a little bit, anybody, about the attitude towards the military in the black community, because, on the one hand, we see a disproportionate number of blacks are joining the military, so it must hold some appeal. On the other hand, if you look at poll data results about the attitude towards the military in the black community, I don't know what you draw from the fact that a much lower percentage of blacks than whites supported the war itself; maybe that is not much of an indicator. But if you asked the black community, "Would you like to cut defense and shift the resources to some other agency?" a higher percentage of blacks than whites think that is a good idea.

Tell me what the blacks think about the military, because, on the one hand, there are certain indications that they look at it as obviously some way in which there is a chance for advancement here, and, on the other hand, they don't really support the military as an institution. Or is there something about the Middle East war? Is the black community less likely to want to use the military?

Does anybody know, was there a racial gap on the Vietnam war? The support of all Americans was pretty much downhill from a certain point. I don't know whether they opened up the gap, but there was really, for a while here, a big gap between blacks and whites in the attitude towards this war, the war against Saddam Hussein.

Mr. DORN. Mr. Chairman, I am reminded of the story of the two women talking in a restaurant in a Borscht Belt resort, and one of them says, "The food here is really awful," and the other says, "I agree, and the portions are so small."

There is a clear ambivalence in the black community, and we have not quite sorted it out. On the one hand, you are absolutely right, blacks in surveys show that they were much less enthusiastic about the Reagan era military build-up and were much less enthusiastic about the Bush administration's Persian Gulf policy than were whites.

I should say that while the precise numbers were all over the map, generally what we found with respect to Persian Gulf support is that whites were overwhelmingly supportive while the black community was more or less evenly split throughout that period.

On the other hand, just as blacks are unenthusiastic about high levels of military spending, if you ask another question, as the National Opinion Research Center did in the early eighties, about how one feels about the high level of black representation, one finds that both blacks and whites are equally enthusiastic about those fairly high levels of representation.

So there is an ambivalence, and I suppose it is the ambivalence of desperation, if I can engage in a little hyperbole. That is, what the community seems to be saying is, "Look, this stuff is awful, but there is also too little of it." That is, "As long as you must spend heavily on the military, we want a fair share," and there is genuine pride, increasing, I suspect, as a result of the recent Persian Gulf effort, growing pride that blacks have in members of the com-

munity who served in the armed forces. It is an ambiguous situation; one has to live with that ambiguity.

I must say that an extreme form of this echoed across Capitol Hill on January 12, when members of the Congressional Black Caucus, that voted overwhelmingly against the resolution authorizing the war, whether or not they had separated themselves from the mass of the black community or whether they simply were ahead of the black community is an open question.

I think it is absolutely clear, as Mr. Walters and others have suggested, that if the Nation had become embroiled in a really awful ground conflict, that one would have seen protests rising dramatically in the black community.

Mr. WALTERS. Yes. I would simply support that by saying that the thing which prompted me last December to write this op-ed piece in the Post was this sense of ambiguity that I saw, and the way I put it was that black troops, of course, could exist in the sands of Saudi Arabia in splendid equality while, at the same time, the President is vetoing the civil rights bill of 1990, at the same time the Department of Education is making noises about taking away minority scholarships.

So we see the military service not in the absolute way that some people see it but against the backdrop of a situation of disadvantage. It is obvious that it has to be that way. So if you have a military build-up and the funds come from the social sector, it is obvious that that is not going to be the most popular thing to do, and that is certainly not going to be the most popular sector.

On the other hand, I think I was serious about our utilization of the military as a social service program. I went to school on a national defense fellowship; that is how I got my doctorate. If you asked me whether or not I felt that I should go into the military or fight a war or something, I would probably tell you no, I would rather not do it, but I was glad to accept the national defense fellowship.

It is the same way with a lot of the kids that I see every day wearing ROTC uniforms. The kids feel a very strong sense of disadvantage in this society, feel that they have been victimized, but, at the same time, they are trying to make the best of a bad situation, as Ed talked about.

So there is this sense of ambiguity toward the military. I think people are genuinely proud of Colin Powell and what he has done individually, but if you asked them whether or not they were necessarily proud of his military role, you might get another response. Here again, this sense of ambiguity, and it comes from the fact that the African American community has very little choice in the matter; it really has to play the cards that it is dealt, and it is in an ambiguous situation as a community, and that is sort of naturally and very honestly reflected in its attitude toward the military. It has to take advantage of it. At the same time, it doesn't want to continue to pay the disproportionate sacrifice for it.

The CHAIRMAN. Mr. Walters, let me ask you this. Suppose that the President who led us into this war had been—let's suppose he had been a Democratic President who was for civil rights, had in fact supported the civil rights bill, and was your kind of conventional Democrat on domestic issues, which is for more social spend-

ing and all of that. Would that have made a difference in the black community in terms of the support for the war?

Mr. WALTERS. That is a hard one, because, again, this was raises these contradictions of having taken place against the backdrop of the last decade. If you wipe that away, and say if you had had a Democrat in the White House, and they would have taken sort of a different approach toward social spending, it may have made blacks far more willing to participate in this; it may have taken away the sting; it may have taken away the contradiction that people are talking about. On the other hand, it wouldn't have completely taken it away.

It depends, because I was around in the period 1961 to 1966 when the black community saw these large figures in Vietnam and began to talk to the military officials about it. In 1967, of course, it was changed, and you began to get a different result in terms of the casualties from then on. So it depends. It is not just a question of the social situation, although that is the major determinant, but if they serve in the military disproportionately and pay the price disproportionately, there is still going to be an outcry.

The CHAIRMAN. Thank you very much.

Any other questions? Nobody else.

Gentlemen, thank you very much for a very interesting afternoon. We appreciate it.

[Whereupon, at 3:23 p.m., the committee was adjourned.]

NATIONAL GUARD ROUNDOUT BRIGADES

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, Friday, March 8, 1991.

The committee met, pursuant to call, at 9:30 a.m., in room 2118, Rayburn House Office Building, Hon. Les Aspin, (chairman of the committee) presiding.

STATEMENT OF HON. LES ASPIN, A REPRESENTATIVE FROM WISCONSIN, CHAIRMAN, HOUSE ARMED SERVICES COMMITTEE

The CHAIRMAN. The meeting will come to order.

Now, this morning we continue hearings into the Armed Services Committee's examination of our national security needs in the post Cold War era.

We are reviewing the impact of two historical events, the decline of the Warsaw Pact threat, and war in the Persian Gulf. What we are looking at is the way in which those two events affect the way we do defense business. One of the key elements of the way we do defense business is the right mix of active and reserve forces, and that is one of the central questions facing us as we think about sizing and shaping our forces over the next 5 years.

That is what makes today's hearings on the readiness of combat reserves so far-reaching. Under the total force policy, designating national brigades to form a third maneuver brigade of active divisions is part of the key of the way we have structured this thing since the early 1970's.

Three roundout brigades were eventually mobilized during the gulf crisis, but in two cases the parent divisions already had been deployed to Saudi Arabia by the time the roundouts were called up, and in every case I think it took longer to get the roundout brigades up to full capability than we thought.

Basically, I think we are interested in a number of questions here today, how ready were the roundout brigades, was it realistic to expect them to be deployed within 30 days, what was the active Army role, and finally, what are the lessons of the war for combat reserve components, what are the lessons for this whole notion of roundout brigades?

I think at the time when this thing began, the Chairman of the Veterans Committee, Mr. Montgomery, the Chair Lady of the Personnel Committee and I urged the administration to call up these combat brigades as a test to find out exactly how good they were, and so this turned out to be a very, very important, we thought, opportunity to test the system which really had not been tested since it was started in the early 1970's.

So what we are doing here today at this hearing and what we will be doing in subsequent hearings and field exercises and other things is drawing some conclusions from this experiment, what lessons are we to learn, what is the moral of the story here in terms of the capabilities of these roundout brigades.

The committee is pleased to welcome as witnesses Gen. Edwin Burba, who is the Commander of the Forces Command, Lt. Gen. John B. Conaway, who is the Chief of the National Guard Bureau, and the commanders of the three activated roundout brigades. Col. James Davis is the Commander of the 48th Infantry Brigade; Col. Fletcher Coker, the Commander of the 155th Armored Brigade; and Brig. Gen. Gary Whipple, the Commander of the 256th Infantry Brigade.

Gentlemen, welcome this morning. Before we begin, let me call on Bill Dickinson for some comments.

STATEMENT OF HON. WILLIAM L. DICKINSON, A REPRESENTATIVE FROM ALABAMA, RANKING MINORITY MEMBER, HOUSE ARMED SERVICES COMMITTEE

Mr. DICKINSON. Thank you, Mr. Chairman.

General Burba, General Conaway, gentlemen, I, too, would like to join in welcoming you to the committee today. We are about to examine the lessons that might be learned from the recent mobilization and training of the three National Guard Brigades.

Learning the right lessons is critical for this Nation for one simple reason, the rapid decline in the size of the active forces means that the National Guard combat forces will have to mobilize very early in some crises and deploy to combat as soon as 30 to 60 days later.

Our history shows repeatedly what happens when we force inadequately trained men and women and units to learn combat skills on the battlefield. Those who survive become excellent soldiers in effective units, but their skills have been bought at a cost of much blood. That is why I believe that the roundout brigades should have been mobilized for training when their parent divisions deployed.

I also believe that the Army and the DOD was justified in not immediately deploying any of the roundout brigades to Desert Storm before being absolutely certain that these units were adequately trained, prepared, and equipped, and in addition to that, we even had one reason for the delay, which is most final, that General Schwarzkopf told us when we were there in September, there was a logistics problem; that even if they had been ready, because of the transport and logistical problem, they would be delayed anyway.

What we know now is that all three brigades have undergone tough, unrelenting training periods. The three brigade commanders sitting here today have led their units through a crash course in readiness unrivaled in intensity by any National Guard Unit and a few active units in over 50 years.

Less resilient units, I think, would have fallen apart. These units emerged stronger and more proficient than ever. In doing so, the men and women of these brigades, the 48th, the 155th and the 256th proved once again that sometimes we have forgotten that if

America's sons and daughters are given the right training, the right equipment and effective leadership and adequate time, they have the motivation and the ability to be great soldiers able to fight and win against any enemy anywhere at any time.

I look forward to the testimony of you as our witnesses today, and in it we will find evidence that the roundout concept has an important role to play in the total force policy. Thus we should retain what we have. I think we will also hear ways to better prepare the future as to how we will do our roundout units for more rapid mobilization and deployment, so they have filled an important niche.

I think they have proven the concept. We are proud of what has happened, and we are looking forward to lessons learned. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Mr. Dickinson. Gentlemen, the floor is yours.

I guess we will start with General Burba, then go to General Conaway, then the three brigade commanders. Is that all right?

General Burba, the floor is yours, sir.

STATEMENT OF GEN. EDWIN H. BURBA, JR., COMMANDER IN CHIEF, FORCES COMMAND

General BURBA. Mr. Chairman and distinguished members of the panel, I am deeply honored to be here today to give the Forces Command's perspective on the Army's roundout concept.

I have prepared a written statement that I request be entered into the record.

The CHAIRMAN. Without objection, all material that the witnesses want will be entered into the record.

INTRODUCTION

General BURBA. I also have a brief oral statement that I would like to make and then respond to any questions of the panel. To provide perspective on our roundout brigade policy, I would like to comment on our employment concept for these brigades prior to Operation Desert Shield, why we deviated during this most recent contingency crisis, whether the concept still is relevant given the short fused, highly lethal contingency nature of emerging warfare, and if it does still have relevance, how we need to refine it.

Our concept from the beginning was to deploy our roundout brigades to join their parent active component divisions in the execution of both their general war reinforcing, and contingency war plan missions. Those plans did not foresee deployment as early as required for Operation Desert Storm.

This most recent crisis allowed very little, if any, post-mobilization training. Fortunately, the first requirements allowed us to replace the roundout brigades with active units, which recently underwent extensive training and were at higher readiness levels.

Please remember, when we deployed these units the probability was very high that they would be employed in combat immediately upon arrival. It is the solemn obligation of anyone granted authority to choose who should go into close combat to send only those who are most ready.

We owe it to our soldiers and we owe it to the American people. The modern, highly lethal battlefield, has intensified that obligation. This was not an academic exercise. Soldiers' lives were on the line. The next logical question is why didn't we call up the roundout brigades upon outbreak of the crisis, if not for immediate deployment, for later deployment.

All our reservists were called up initially under the Presidential 200,000-man call-up authority which has a 90-day active duty limitation with an additional 90-day extension if warranted. Given the time requirements for post-mobilization training and sea deployment, the brigades would have had insufficient time in theater to make significant contributions.

When the tour length was extended, we moved promptly to call up the roundout brigades to form an integral part of our early reinforcing force constituted principally of two Active Component Divisions.

COMPLEXITY OF MANEUVER UNITS TRAINING

Why couldn't we have had the roundout units at sufficient readiness posture to have deployed quickly with their parent divisions? Why is it so challenging to keep our reserve combat units at high readiness posture when we have reasonably good success with our support units?

The answer is these latter combat support and combat service support units generally have uncomplicated unit functions, even though many of their individual skills are complex. They include units with civilian equivalencies, such as medical, maintenance, transportation, and supply as well as equipment-oriented unitary task specialties that can be accommodated during week-end training such as aviation, artillery, air defense, and engineers.

On the other hand, combat units, such as cavalry, infantry, and armor have maneuver skills and complex synchronization skills at company level and higher that are difficult to train during week-end drill periods. The training of these combat units at company level and higher integrates not only maneuver skills, but those of Army Aviation and Air Force Lift and Fire Support, Artillery, Air Defense Artillery, Engineer, Signal, Military Intelligence, Maintenance, Supply, Transportation, Medical, Military Police, Chemical, and a whole host of others.

They have to synchronize everything that we do on the battlefield. The tasks and standards associated with these synchronized skills change at all levels as battlefield conditions change. Their execution is more an art than a science, and they take considerable time and effort to master.

RELEVANCE OF ROUNDOUT BRIGADES

Given these very challenging training requirements associated with the roundout brigades, are these brigades still relevant given the emerging short fused contingency environment? We think they are, and I would like to explain why. Forces Command's own analysis of existing war-gaming and empirical data to include observations already received from Operation Desert Storm leads us to

conclude that Active Component forces will be required to seize and protect air fields and seaports for follow-on forces.

These initial forces, to include combat and support units, must be Active Component because they must leave on the first day of the crisis or certainly very soon thereafter. These forces are the ones who deter and hold. Our analysis shows we must have an immediate follow-on force to augment them.

The role of this second force is to stabilize the crisis situation. While we will probably not be able to resolve the crisis with this follow-on force, it can ensure we will not lose or experience a series of tactical emergencies from which we cannot recover.

These stabilizing forces must be heavy units that will be deployed by sea shortly after the first day of the crisis. The combat elements of this force again must be from the Active Component because they must be trained and ready to go on short notice, but there are critical and substantial roles to be played by Reserve Component support elements, the logistical backbone, as we have seen in Operation Desert Storm.

In order to resolve the crisis, other forces will be needed to restore lost terrain and/or defeat enemy forces. Because the stabilization forces can buy us time, these latter forces can take longer to deploy, and given sufficient pre-mobilization readiness and post-mobilization training time, can include not only Reserve Component support troops, but also Reserve Component combat forces.

The National Guard roundout units, accordingly, are still relevant. This is particularly true in light of multiplying threats caused by emerging political-military multi-polarity in the international environment and domestic budget deficit driven reductions in active component force structure.

Given the need to keep the roundout concept and given challenges of increasing roundout unit readiness, how should the concept be modified? Matching these units' readiness with the emerging national security environment can best be achieved by the following:

Improving the quality and quantity of full-time support while realigning it to better address small unit level training needs, harnessing multiple technologies, to include simulations to increase the amount of relevant training possible at weekend training locations, making annual training more realistic and demanding based on mission essential tasks, reducing training distractors, formulating and executing more robust RC specific—Reserve Component specific—institutional level leader training programs, achieving a more realistic balance of individual, small and large unit collective training during weekend drills, and summer annual training programs, and decreasing the personnel turbulence while retaining specialty-qualified soldiers.

We are developing the details of these programs to include cost-effect analyses. We are not excluding the possibility that major changes may be required. The enormous progress our National Guard roundout units have made during the past 3 months while training at Fort Hood and the National Training Center is a reflection of their intrinsic professionalism, their military competence and commitment, and a strong testimony of roundout units' viability.

ty for deployment with our early reinforcing active divisions for contingency operations.

As I stated before, the capabilities of these soldiers are only constrained by the time-consuming nature associated with their synchronization skills and the lack of week-end maneuver areas.

If we refine the concept, as I have indicated, these brigades will continue to give us cost-effective, professional execution of the roles and missions I have outlined. Sir, thank you for this opportunity to appear before your panel. I stand by ready to respond to your questions.

PREPARED STATEMENT OF GEN. EDWIN H. BURBA, JR.

Mr. Chairman, and distinguished members of the Panel, I am deeply honored to appear today to present Forces Command's perspective on policies governing the Army's combat brigades in the Reserve Component, especially as they pertain to the three roundout brigades mobilized last fall for employment in Operation DESERT SHIELD/STORM.

To provide perspective on the call-up of the roundout brigades, first allow me to provide a brief overview of Forces Command's role in Operation DESERT STORM/SHIELD. Our responsibilities were those of task organizing, mobilizing, training and deploying Army units to Southwest Asia in support of U.S. Central Command. Within 18 hours of notification, we began rapid deployment of a deterrent force comprised of the XVIII Airborne Corps with the 82d Airborne Division and elements from the 101st Airborne Division (Air Assault).

This deterrent force was rapidly followed by heavier units required to stabilize and, if necessary, successfully defend

Saudi Arabia. This force consisted of the remainder of the 101st Airborne Division (Air Assault), two heavy divisions (the 24th Mechanized Division and the 1st Cavalry Division), one armored cavalry regiment (the 3d ACR), and several hundred combat support and combat service support elements. Many of these latter units were Reserve Component units called up to perform critical missions of units not available in the active force.

During the final phase, Forces Command provided a heavy division (the 1st Infantry Division) and many other units in support of Europe's VII Corps. Additionally, we provided units and personnel to backfill European and Continental United States installations with critical skills such as medical, military police, maintenance, garrison administrators and other support personnel to replace elements that deployed to the theater.

To date we have deployed over 136,000 soldiers from our CONUS-based Active Component force, and called to active duty over 139,000 Reservists and National Guardsmen from over 2,000 towns and cities in every state throughout the Continental United States, District of Columbia, Guam, Germany and Puerto Rico. Over 1,000 Reserve Component units were mobilized in support of Operation DESERT SHIELD/STORM.

The performance of our Guardsmen and Reservists is one of the major success stories of the entire operation. Without these soldiers and the superb, cooperative work of our five Continental United States Armies (CONUSA), state National Guard organizations and Army Reserve commands, we could not have accomplished so much in such a short period of time.

The Secretary of Defense and the Chairman of the Joint Chiefs of Staff have presented the chronology of the call-up and deployment decisions in Operation DESERT SHIELD. However, a brief review of the scenario may be useful. Our combat units with the highest readiness were deployed first, because in those early days the probability was very high they could be engaged in combat immediately upon arrival. It is the solemn obligation of anyone granted authority to choose who should go into battle to send only those who are most ready; we owe it to our soldiers and to the American people. The modern, highly lethal battlefield has intensified that obligation. This was not an academic exercise; soldiers' lives were on the line.

Strategic lift limitations required us to prioritize. Priorities were set first by the needs of the crisis area

Commander in Chief and then by what units could immediately meet those needs. That basic principle has governed all of our mobilization and deployment decisions.

There has been considerable debate concerning the evolving role of Reserve Component combat units and especially the roundout brigades in this operation. The initial Operation DESERT SHIELD/STORM mission and conditions led to an assessment that the maneuver unit requirements could only be met with Active Component brigades. These Active units will always be the most combat ready in the early days of any crisis by virtue of the extensive amount of training time available to them vis-a-vis Reserve units.

During this latest crisis we had to initiate deployment of one division which had a roundout brigade on the first day of the crisis and another shortly thereafter. Although it was planned for our roundout brigades to participate in contingency conflicts, they were not conflicts of this short-fused nature. Later, after Presidential authority was received and restrictions were lifted to allow adequate time to realistically train and deploy the roundout brigades, they were mobilized to provide sufficient positive force correlation to hedge against a combat stalemate in the theater. This point

deserves amplification--the legal time constraint of 90 days plus a 90-day extension, under Title 10, U.S. Code 673b, made it impractical at first to call up RC combat units. When the tour length was extended, we moved promptly to call up these roundout brigades to form an integral part of a reinforcing capability for future use if required. I will address this issue further, but first let me review several strategic considerations associated with the role of the Reserve Component in our Total Force.

A balanced force is required for the new contingency environment. There are analytical aids in determining the proper Total Force mix. Gaming and empirical analyses reveal that in our highest risk contingency scenarios such as Operation DESERT STORM, a critical factor in operational success is the speed at which forces can be introduced into the area of operations.

To begin, sufficient rapid deployment forces must be introduced immediately by air to deter the enemy and to secure aerial and sea ports for use by follow-on forces. These units must be Active Component forces due to the requirement for immediate, no-notice readiness. Also immediately, sufficient heavy forces must embark by sea to operate in conjunction with

prepositioned heavy forces to stabilize the situation. Active component combat units, with Reserve Component combat support and combat service support, is the proper composition for this stabilizing force. If these forces arrive too late, or in insufficient numbers, so many tactical emergencies develop that, regardless of the number of follow-on reinforcing forces arriving later, we cannot recover.

In order to resolve the crisis, other early reinforcing units would be required to restore lost terrain and/or defeat enemy forces. These forces can take longer to deploy and--given an adequate level of pre-mobilization readiness and post-mobilization training time--can include not only RC support troops, but also Reserve Component combat forces. The National Guard roundout units, accordingly, still have important contemporary relevance. This is particularly true in light of multiplying threats caused by emerging political-military multi-polarity in the international environment and domestic budget deficit-driven reductions in Active Component force structure.

You will note that the factor of time is central to my description of the strategic requirement. This "when" dimension is absolutely critical in determining the Active

Component-Reserve Component mix. It is increasingly important for Reserve forces to be fully ready at the time required. Future timelines will be more demanding than those of Operation DESERT STORM. Potential adversaries are not likely to repeat the mistake of Saddam Hussein. They will attempt to take advantage of the time required to deploy follow-on forces and take quick, aggressive action before we are able to focus our full military power. Our challenge is to reduce this enemy window of opportunity.

To reduce the enemy window of opportunity, we must reduce our deployment time, achievable primarily through increased readiness of our combat forces. There is public confusion over just what that involves. Readiness--particularly when applied to a unit as large and complex as a maneuver brigade--is not easy to achieve for either the Active or Reserve Components. For the Reserve Component, achieving readiness to operate successfully on the dynamic battlefield evidenced in Operation DESERT STORM requires intensive training after mobilization.

Let me expand on this. Roundout infantry and armor units must become expert at synchronizing complex battlefield systems such as Army aviation, air defense, direct and indirect fire support, command and control, intelligence, engineer, close air

support and logistics to fight and survive on the battlefield. Proficiency with these synchronization tasks comes with rigorous, repetitive collective training at company level and above. It should not be surprising that combat maneuver roundout units require significantly more postmobilization training than combat support and combat service support units. The complex and unforgiving nature of these tasks and difficulty in training them during weekend drill periods pose a difficult challenge to roundout combat units.

Added to the problem of maneuver skill complexity is the difficulty of maintaining sufficient numbers of individuals with specialty skills. Typically, maneuver units have larger numbers of speciality personnel. It takes from one to three years for a new (nonprior service) Guardsman to become qualified in his occupational specialty depending on the technical training required. Reasons for this include the need to take time off from a civilian job to attend school. Transfer of a prior service soldier into a maneuver unit may cause even greater problems. The commander reclassifies and retraines the soldier to ensure he has gained the requisite level of proficiency in his new specialty. Means for providing new skill qualification reside in: formal service school attendance, local USARF School training, or on the job training.

Maintenance training is also important and very challenging. I have observed that on a day-to-day basis, Reserve Component unit equipment is reasonably well maintained. Only when a unit moves to the field for an extended period does it become apparent that operator knowledge, mechanic diagnostic skills, and knowledge of the Army maintenance system are generally lacking. Our Reservists lack time to train and maintain their equipment; therefore, they receive substantial centralized full-time support in the equipment maintenance area in order to free them for training. Although this provides the maximum use of maneuver and gunnery training time, it does not provide optimum opportunity for soldier acquisition of organizational level maintenance skills. We have learned more about how to solve this problem in the past three months and we are optimistic that, provided an increase in decentralized full-time support, remediation is within our grasp.

Training leaders of a combat battalion, both NCOs and officers, is also a challenge. The skills must be learned in institutional schools and then reinforced through repetitive practice. The progressive nature of leader training means it

must be accomplished sequentially, further complicating readiness for those with limited training time--such as our RC unit leaders.

Maneuver warfare obviously is not a civilian skill. Unlike many of the critical roles our Reservists perform in the transportation, supply, medical and legal areas, combat skills must be learned through repetitive field training in relatively large maneuver areas which normally are not available for weekend training. Our Reserve Component combat forces must train together and practice synchronization. These skills must be attained through field training exercises and through the use of simulations during weekend and annual two-week training. As a result of our recent postmobilization training programs, we now understand how to do this better, given the challenging RC training environment.

Related to the difficulty of mastering complex skills in short training periods is the fact that, in many cases, units are not within geographic reach of the facilities and large maneuver areas where these skills can be practiced. For example, approximately 30 percent of all Reserve Component armor units cannot perform gunnery training on weekends due to distance and travel time requirements. Added to this, at

battalion level, the components of the average Reserve unit are dispersed over a 150-mile radius--with some extending beyond 300 miles. The limited time available to train, combined with the widespread geographical separation of subordinate elements, presents an extraordinary training challenge to Reserve Component soldiers and leaders. In the final analysis, it is significantly complicated to become ready to operate successfully on the modern, lethal battlefield. As you can see, we must improve roundout units' readiness to accelerate their deployment posture, but there are many impediments to achieving this. How do we solve this problem?

Reserve Component roundout unit integration into the contemporary national security environment can be achieved by:

- Improving the quality and quantity of full-time support while realigning it to better address small unit level training needs;
- Harnessing multiple technologies to include simulation to increase the amount of relevant training possible at weekend training locations;
- Making annual training more realistic and demanding based on mission essential tasks;
- Reducing training detractors;

- Formulating and executing more robust, RC specific, institution level leader training programs;
- Achieving a more realistic balance of individual, small and large unit collective training during weekend drills and summer AT programs.
- Decreasing personnel turbulence while retaining specialty qualified soldiers.

We are developing the details of these programs to include cost effectiveness analyses. We are not excluding the possibility that major changes may be required.

Let me explain several of these proposals in more detail. Prior to mobilization, during Inactive Duty Training (IDT), individual and crew level skills must be the centerpiece of the unit's training program. Basic gunnery and preventive maintenance skills should also be honed to a measured level of proficiency to establish a baseline from which the unit can progress to small unit collective skills. During the unit's two-week Annual Training (AT) period, small unit collective skills--platoon and company level maneuvers and gunnery--must be exercised. This begins the difficult synchronization training process that is so critical to the success of combat units on the modern battlefield. Some multi-echelon battalion and brigade training is necessary but not to the hindrance of lower level skills.

Battalion and brigade level commanders and staff training should be focused on simulation training. It must be aggressively pursued so that our leaders can be trained to orchestrate the complex operating systems of today's airland battlefield. This includes attendance at the Tactical Command Development Course and frequent use of battle simulations. Schools for officer and NCO professional development and special qualification training also must be pursued to precipitate technically and tactically proficient, homogenous fighting units.

Upon mobilization, roundout units should ideally train with their parent Active Component division in order to be validated with their individual and small unit level collective skills. Once this is accomplished, a requirement exists to train at the battalion level and then to refine skills at the brigade level in such areas as gunnery, maneuver warfare and combined arms operation. This training should be accomplished whenever possible during a rotation through the National Training Center.

During both pre- and postmobilization, it is highly

desirable that training be conducted with and under the guidance of the Active Component division commander. This will ensure that standards are consistently validated throughout the roundout unit's training program. In the scenarios for which the roundout concept is applicable, i.e., with early reinforcing as opposed to rapid deployment forces, there would be time for training and deployment with the full division. In Operation DESERT STORM, this obviously was not the case.

Because there is insufficient time to train these skills prior to mobilization, the roundout brigades cannot and were never intended to be deployed during the initial phases of contingency operations. Based on our roundout brigades' readiness status at the onset of Operation DESERT STORM, I originally estimated the need for a training program in excess of that adopted. However, the situation in the Persian Gulf appeared to require an earlier availability of these units. Thus, we developed a 70-day training program focusing on enhancing leadership, combined arms integration and maintenance readiness. As the situation evolved in the Gulf, it became apparent that more time was available. We took that time and further mastered the 48th Brigade's combat skills. They are now validated as combat ready against the Iraqi threat. They achieved that proficiency much faster than I originally anticipated.

The enormous progress that our National Guard roundout units made during the past three months training at Fort Hood and the National Training Center is a reflection of their intrinsic professionalism, competence, and commitment. They are testimony of roundout units' viability for deployment with our rapid reinforcing Active divisions in contingency operations. As stated before, the capabilities of these soldiers are only constrained by the limited weekend training opportunities they have and the time-consuming nature of learning to master the synchronization of complex, lethal battlefield operating systems.

Thank you for this opportunity to appear before your Panel. I welcome your questions.

The CHAIRMAN. General Burba, thank you very much.
Now General Conaway.

STATEMENT OF LT. GEN. JOHN B. CONAWAY, CHIEF, NATIONAL GUARD BUREAU

General CONAWAY. Thank you, Mr. Chairman, and members of the committee. I appreciate the opportunity to be here as Chief of the National Guard Bureau, and I thank this committee for their tremendous support over the years in helping with the readiness of the National Guard, both Army and Air.

I want to put out a couple of accolades to all of our men and women of the National Guard that have served. Almost 80,000 have been called and served, over 65,000 in the Army National Guard. The Army, General Burba, General Vuono, General Schwarzkopf, sent almost 40,000 of them over to theater with almost half of that number involved in flowing with the Corps and supporting them in the combat arena.

I am glad to be here with my tremendous colleagues sitting with me, but I have so many brigade commanders around me, including General Burba, my dear friend in his younger day or earlier day. He has been of tremendous support to our National Guard units. I have worked very closely with him in the 1 year that I have been Chief of the National Guard Bureau.

I have learned a tremendous amount from General Burba, so I applaud him for what he has done in the mobilization of our units and the deployment of our units, over half of them, as I said, to theater, the rest to places like Europe and backfilling in the United States, and the training for these three huge maneuver brigades.

I have with me the Deputy Director of the Army National Guard, Brigadier General Jack D'Araujo. Jack, if you would, please stand.

Jack is the new Deputy Director since 1 November; no stranger to working in the Guard Bureau. He also was just recently a separate brigade commander from our 50th State, Hawaii.

Jack has also served in Guam and was called up in the 1968 call-up, the last call-up prior to this one, the Pueblo call-up and Vietnam crisis. I was also activated on the other end of the line in that particular one, so it was most unusual for me to be on this end doing the calling up. It is a pleasure to be here with my three great comrades, the three brigade commanders. Jack D'Araujo and I visited them when General Burba allowed us to go to Fort Hood and the National Training Center, where Don Davis didn't look near as clean as he does right now when he was out there in the desert getting ready for his first force on force exercise with the 48th.

These three gentlemen with their brigades, I think, have done a tremendous job in getting them ready. They are ready to go at this time, so my thanks to all of the members of the National Guard, to the families who made these sacrifices also while they were gone, as did the active duty families, and to our fallen National Guard men and women who fell in combat or as a result of Desert Shield and Desert Storm, as we have 11 to date, sir.

We are proud of these five brigades. There are five brigades that have been mobilized by the Army, two field artillery brigades, the

142nd from Arkansas and Oklahoma, and the 196th from Tennessee, Kentucky, and West Virginia, that performed distinguished services, as I mentioned, while providing fire support for the Allied Coalition in the Kuwait and Iraqi operations.

Initially, the Secretary of Defense guidance for mobilization called for the Army National Guard units to include only combat support and combat service support units. Since artillery is considered combat support, the two Army National Guard artillery brigades were called, deployed, and engaged in action within theater.

In mid-November 1990, the Secretary of Defense revised the mobilization policy to include combat units in the Army Guard and Reserve. At that time, three Army National Guard brigades, the 48th Brigade, Georgia Army National Guard, the 155th Armored Brigade, the Mississippi Army National Guard, and the 256th Infantry Brigade of the Louisiana Army National Guard were called.

The 48th and 256th entered Federal service on November 30th and the 155th on December 7th. The 48th completed their post-mobilization training on February 28th at the National Training Center, and the two other brigades are scheduled for completion during the next few weeks.

These three brigades have been closely observed and monitored by Members of Congress, the media, the Army, and Defense officials throughout the post-mobilization training cycle.

We welcome this opportunity to discuss these brigades and areas of common interest. However, I would like to briefly share my personal observations and suggest several significant lessons learned.

I personally visited each of the three brigades on two occasions, once upon mobilization, and then during their training process a couple of weeks ago.

Maj. Gen. William Navas, Vice Chief of the National Guard Bureau, Maj. Gen. Don Burdick and General D'Araujo also observed these brigades during the training cycle. My conclusion is the 48th Infantry Brigade is fully trained and ready for worldwide contingency deployment through superb training that the Army has provided for them.

I applaud that. I have been in training my entire life with the Air Force and Air National Guard. I commend the 48th and each of these brigades for the dedicated soldiers and officers who have gone through this intense program. They completed the training with exceptional success, although it was the largest unit to train at the National Training Center and the first to complete the new Sumerian training cycle.

These soldiers were as dedicated as I have ever seen. The 155th Armored Brigade of Mississippi is scheduled to complete its final phase of training at the National Training Center this month. They are expected to fully meet the National Training Center training standards and be designated for a contingency role after that anywhere the Army might need them.

The 256th Infantry Brigade of Louisiana, despite some initial delays resulting from new training and new equipment training requirements, are progressing very well. The guardsmen have responded with pride and are committed to meet all standards of their companion brigades.

Training experts agree that the 256th will achieve a fully ready deployment status within their prescribed training cycle. Army National Guard combat brigades must be called as soon as combat support and combat service support units are federalized or their parent divisions are deployed.

Failure to do so can arbitrarily degrade their capabilities compared to the combat support and combat service support units and the gaining Army divisions.

Post-mobilization training: Post-mobilization training is needed. It is always planned to bring Army National Guard units, particularly the larger units, brigade-sized units, to a fully ready status, and divisions as well, should they be called.

Training time will differ, depending upon the post-mobilization training plan that the Army may lay out for them. The Guard brigades were trained and resourced for deployments within 45 to 60 days of federalization. Mission essential task lists differed as tasks did have to be changed and training times extended. It is important to emphasize that the three brigades did meet most of their readiness standards and requirements for which missioned and resourced prior to mobilization.

Deployment: Deployment wherever possible of roundout brigades should be phased with the gaining divisions on completion of post-mobilization training. Training on terrain in the theater of operations with the command and communications and control coordination between units does build on peacetime roundout relationships.

We have also identified significant areas which need review or improvement. For example, more emphasis needs to be placed on unit level maintenance capability and training readiness to support the protracted operations, and that is one that General Burba and I have talked about and we have to work on in the National Guard with our States, with the Army, with the CONUSAS and with the readiness training groups.

Systems compatibility can be improved, particularly in personnel and supply management, although considerable improvements have already been achieved. A standardized Army readiness evaluation system can help provide a more uniform assessment of units in the Total Army.

Leadership training and development are currently being reviewed to determine if our Guard combat commanders and staff are receiving the most relevant education within that 39 days that most of them have available. There are future roles for the Army National Guard combat brigades. Guard combat brigades can be configured to do whatever military planners and Congress mission and resource us to do.

How ready do you want them to be? Obviously, our Air National Guard side of the House needs to be ready in 24 to 72 hours to support the Army and get to theater. We can't get the large brigades there in that short a time for lack of sufficient sealift and airlift, you need them ready in a certain period of time, 45, 60, 90 days.

How much do you want to spend on early readiness? Are we training about right? Do we need to have more full-time resources? These brigades average 8 percent full-time manning. The Air Na-

tional Guard averages one out of four full-time manning, but they do have day-to-day peacetime operations.

They average between 40 to 45 days a year training versus 70 to 100 days a year training. These superb tank crews are young enlisted soldiers that go to war. The airmen that go to war are pilots and aviators. The majority have higher education, but I think they do an absolutely superb job with the training days they have available.

Typically, our combat brigades have been scheduled for post-mobilization training, and I think one of the myths is that there is no post-mobilization training required. It is come as you are, ready to go, and we don't believe in that. I don't believe in it. We need post-mobilization training for these larger units for deployment schedules averaging between 45 and 90 days.

Sir, that concludes my remarks. I thank each of you for your support and stand by to answer any questions.

PREPARED STATEMENT OF LT. GEN. JOHN B. CONAWAY

Mr. Chairman and Members of the Panel:

Thank you for giving me this opportunity to appear before you in my capacity as Chief of the National Guard Bureau, representing the more than one-half million men and women of the Army and Air National Guard.

We are proud of the fact that five brigades were mobilized for Operations Desert Shield and Desert Storm. Two field artillery brigades, the 142nd from Arkansas and Oklahoma, and the 196th from Tennessee, Kentucky, and West Virginia performed distinguished service while providing fire support for the allied coalition in Kuwait and Iraq operations.

Initially, the Secretary of Defense guidance for mobilization call for Army National Guard (ARNG) units included only combat support and combat service support units. Since artillery is considered combat support, the two ARNG artillery brigades were called, deployed and engaged in action within theater.

In mid-November 1990, the Secretary of Defense revised the mobilization policy to include combat units. Three ARNG Brigades, the 48th Infantry Brigade, Georgia ARNG (GA ARNG); the 155th Armored Brigade, Mississippi ARNG (MS ARNG); and the 256th Infantry Brigade, Louisiana ARNG (LA ARNG); were called. The 48th and 256th entered active federal service on November 30th, and the 155th on December 7, 1990. The 48th completed their

post-mobilization training on February 28, and the two other brigades are scheduled for completion during the next few weeks.

These three brigades have been closely observed and monitored by Members of Congress, the media, Army and Defense officials throughout their post-mobilization training cycle. We welcome this opportunity to discuss these brigades and areas of common interest. However, I'd like to briefly share my personal observations and suggest several significant lessons learned.

I personally visited each of the three brigades during their training process. Major General William Navas, Vice Chief, National Guard Bureau; Major General Donald Burdick, Director, ARNG; and Brigadier General D'Araujo, Deputy Director, ARNG; also observed the Brigades during various phases of their training cycle. My conclusions:

48th Infantry Brigade. The 48th is fully trained and ready for worldwide contingency deployment. The brigade completed training with exceptional success, although it was the largest unit to train at the National Training Center (NTC) and the first to complete the new "sumerian" training cycle. The soldiers were dedicated and enthusiastic.

155th Armored Brigade. The 155th is scheduled to complete its final training phase at the NTC this month. The 155th is expected to fully meet the NTC training standards and be designated for a contingency mission role after NTC.

256th Infantry Brigade. Despite initial delays resulting from new equipment training requirements, the 256th is progressing well. The Guardsmen have responded with pride and are committed to meet all the standards of their companion brigades. Training experts agree that the 256th will achieve a fully ready deployment status within their prescribed training cycle.

ARNG combat brigades must be called as soon as combat support (CS) and combat service support (CSS) units are federalized or their parent divisions are deployed. Failure to do so arbitrarily degrades their capabilities compared to the CS and CSS units and gaining Army divisions.

Post-mobilization training. Some post-mobilization training period is always planned to bring Army National Guard units, including brigade size units to a fully ready status. Training time will differ depending on the post-mobilization training plan. The Guard brigades were trained and resourced for deployment within 45-60 days of federalization. Mission essential task lists (METL) differed, as tasks were changed and training time extended. It is important to emphasize that all three brigades met the readiness standards and METL requirements for which missioned and resourced prior to mobilization.

Deployment. Wherever possible, deployment of roundout brigades should be phased with gaining divisions on completion of post-mobilization training. Training on terrain in the theater of operations with the command, communications and

control coordination between units builds on the peacetime roundout relationship.

We have also identified significant areas which need review or improvement. For example, more emphasis should be placed on unit level maintenance capability and training readiness to support protracted operations. Systems compatibility can be improved, particularly in personnel and supply management, although considerable improvements have already been achieved. A Standardized Army readiness evaluation system could provide a uniform assessment of all units in the Total Army. Leadership training and development are currently being reviewed to determine if the Guard combat commanders are receiving the most relevant education for the time available.

Future roles for the ARNG combat brigades. Guard combat brigades can be configured to do whatever military planners and Congress mission and resource us to do. Typically, our combat brigades have been scheduled for post-mobilization training and deployment schedules averaging between M+45 to M+90 days.

That concludes my remarks. I thank each of you for your support and look forward to working with you in the future. I will be happy to answer any questions.

The CHAIRMAN. Thank you, General Conaway.

Why don't we just go down the line and start with General Whipple, then Colonel Davis, then Colonel Coker. General Whipple, the floor is yours.

STATEMENT OF BRIG. GEN. GARY J. WHIPPLE, COMMANDER 256th INFANTRY BRIGADE, LOUISIANA

General WHIPPLE. Mr. Chairman, distinguished members of the panel, it is a distinct honor and privilege to address you on behalf of the soldiers of the 256th Infantry Brigade from the State of Louisiana.

This morning I will provide my assessment of the pre-mobilization status of the Louisiana brigade, then describe how that assessment changed after mobilization.

I will cover the following topics. First, I will describe the relationship between the 256th Infantry Brigade (Mechanized) and the 5th Infantry Division (Mechanized).

Second, I will show how equipment modernization drove the brigade's entire training program. Third, I will give you my initial assessment of the brigade's ability to conduct combat operations, and finally, I will show you how I modified that assessment as we went through the training program after we came on Active duty.

On November the 6th the Brigade received the information through the Louisiana State Area Command that it would be called up. During the ensuing days, briefings, information, instruction, and required action were taken to begin mobilization.

On November 15th the brigade was notified it could call up 10 percent of its assigned strength. Personnel were used to assist in pre-mobilization tasks and the complete mobilization preparation. During this period numerous tasks were required to be completed so that the entire brigade could be mobilized on the effective date. These tasks included the conduct of extensive administrative processing of 4,250 soldiers to bring them on active duty from 32 local communities across the State of Louisiana, the reassignment of personnel throughout the brigade to fill identified vacancies and the identification of 273 soldiers needing schools.

Additionally, 44 officers were identified to attend the Officer Basic course and would later join the brigade at its mobilization station. The brigade secured additional master gunner quotas for Bradley and M-1A programs personnel. Based on the mobilization notification, family support groups were put into operation in all communities with unit armories.

The brigade's public affairs office coordinated extensive news media coverage to provide information to both soldiers and family members. The effort of the Adjutant General and Louisiana State Area Command staff was critical in preparing our soldiers for mobilization and preparing their families for an extended separation from their sponsors.

Mobilization brought on the requirement for 100 percent inventory of all unit property. This included equipment located at armories, maintenance facilities, and Fort Polk, Louisiana. Additionally, extensive redistribution of property was required. Other Louisiana Army National Guard Units outside of the brigade had been mobi-

lized prior to the brigade, which required the brigade to transfer property to those units.

This created a shortage within the brigade which had to be fixed prior to the mobilization. Again, the help of the State Area Command in cross leveling the equipment from other States to the brigade helped provide critically needed items for us. Post-mobilization training support requirements were reviewed and updated by units to ensure accurate requirements were identified.

Training area requirements, range requirements, facility needs, initial ration requirements, blocking, bracing and tie-down needs, to mention a few, were submitted. Close coordination with the mobilization station was required due to the number of units being mobilized at Fort Polk. Moreover, coordination between Fort Polk and the State Area Command was essential in affecting the 256th Brigade's transition from State to Federal control.

Movement was planned and coordinated with the State Area Command and mobilization station to facilitate the uninterrupted movement of units from 32 locations within the State. Additionally, coordination with the mobilization station for installations support was accomplished to secure barracks, motor pools, mess facilities, and so forth.

It was the initial expectation of the soldiers, families, and our local communities that we were entering upon active duty to train and deploy to Southwest Asia for combat duty with our division, the 5th Infantry Division (Mechanized). I would like to now describe this roundout brigade's relationship with its division.

The 256th Brigade has had a relationship with the 5th Infantry Division (Mechanized) since the middle of the 1970's. The 256th Brigade has, in effect, been the third of three combat brigades which comprise the 5th Division's combat power under the roundout program.

Once mobilized, the brigade fundamentally implemented the roundout organization as it was designed. The 256th Brigade integrates into the 5th Infantry Division as per the chart that I think has been passed out to you. Note that it is a very complex process with the brigade providing people and equipment to nearly every section of the division headquarters, including a military police platoon and throughout the rest of the division.

Note also that the 2-152nd Armor Battalion is an Alabama National Guard roundout battalion for the 2nd Brigade, 5th Infantry Division and is not a part of the Louisiana National Guard or assigned to the 256th Infantry Brigade. The last point I make here is that before mobilization, I commanded a separate Brigade (Mechanized). After mobilization, I am commander of a brigade combat team organized as shown on the second of the two charts that I have provided for you.

Before talking about training, it is important to understand the modernization program for the 256th brigade. Modernization is essentially a program that completes the transition of a division from one with the M-60 series tanks and M-113 series personnel carriers to one with the modern Abrams tanks and Bradley Infantry Fighting Vehicles.

This program requires us not only to learn to use the new equipment, but it requires gunnery and tactical maneuver training

phases. This equipment has better capabilities that leaders must understand and train their organization to implement because it changes how we fight. It is also not enough just to train operators on how to use new equipment.

The equipment requires new maintenance systems. Mechanics must learn to use new diagnostics, they must learn new ways to replace parts, all must learn the idiosyncrasies of new, far more sophisticated systems. Modernization of National Guard units sometimes requires several years to fully implement because of the complexity of the new equipment and the limited number of training days available to reserve component units.

The 256th Brigade received the Abrams tank in 1989, and in the summer of 1990 the brigade received our Bradley fighting vehicles. In each case the first training phase allowed us only enough time to learn to drive and the basics of maintenance of the equipment. We had not had the opportunity to train to shoot the weapons systems or tactically maneuver them on the ground.

There were no trained experts on these systems within the 256th Brigade prior to the receipt of it. We were required to identify and train vehicle mechanics and missile mechanics. Very few soldiers understood the complexity of this equipment. Any assessment of the roundout program involving the 256th Brigade must take into account the modernization factor and the timing of this modernization effort with the call to mobilize and go to war.

I will now turn to an assessment of the brigade's combat capability before mobilization. I will begin with the maneuver elements which are the two infantry battalions and one tank battalion. Since we had just received the Bradley Infantry Fighting Vehicle, we were untrained in its use.

Both Bradley infantry battalions would not be operationally ready until they had finished the training program. With regard to the tank battalion, in the summer of 1990, immediately following the successful completion of the first phase of the new equipment training, we then began tank gunnery exercises where a stationary tank engaged stationary targets.

The final qualification phase with moving tanks engaging moving targets was programmed for the future. Because the call to mobilize came before we had a chance to adequately train on the new equipment, I rated these units untrained. In contrast, the field artillery battalion was a well-trained unit. I feel that it was capable of putting rounds on target with very little train-up.

Part of the field artillery system required observers to direct the artillery fires for the tank and infantry commanders through the use of forward observation teams. These observers were caught in the middle of equipment modernization and were untrained in its use.

For this reason I rated the field artillery battalion as untrained. The battalion battle staffs were untrained in synchronizing the maneuver elements, fire support, and combat service support because of their required participation in new equipment training. As a result they were unable to participate in battle staff training events.

The brigade staff, on the other hand, had participated in some training events, but needed the tactical commander's development

course training and more practice in developing combat orders and plans. Two other assessments are important.

First, the brigade came on active duty with over 100 percent strength, although some soldiers were not trained for the position they occupied. The brigade was still in great shape in the area of personnel. Second, not all of the brigade's equipment matched that belonging to the active 5th Infantry Division units, and we also had an equipment readiness problem with equipment we were authorized, but had not yet received or for which we had inadequate substitutes.

While this assessment does not detail the status of each unit in the brigade, it gives you a flavor for the brigade's combat capability prior to mobilization and the significant impact modernization had as we were trying to mobilize forward. Before I give you my post-mobilization assessment, I must tell you that it is based on my observation of the units in the brigade as they proceeded through a very demanding training program based on full Army standards.

I will take a moment to describe their training to you. We followed the program prescribed by FORSCOM which proceeded from individual to crew, platoon, company, battalion, and brigade-level training. We noted that many junior leaders lacked the leadership training and experience that allowed them to develop self-confidence and to promote the confidence of their soldiers in them. We attacked this weakness by focusing on leader training prior to the conduct of the training of soldiers.

They had then the knowledge and the confidence to lead their soldiers through a demanding training program. In this manner we completed individual training, crew gunnery, platoon, company, battalion and brigade tactical training and are finishing our platoon gunnery program. Our units have trained until they met the standard established in the Army manuals at each level of the training program before advancing to the next level.

After beginning this training program, my assessment changed in several respects. First, it became even more clear how the Bradley Infantry Fighting Vehicle and Abrams tank changed our capability and increased the requirement for split-second timing and orchestration between various units on the battlefield.

It meant to me that the battle staffs needed to learn to plan to a level of detail that they had not appreciated before, for the speed of operation gave very little room for error. It also meant that in addition to learning their own equipment, tank and Bradley unit commanders needed to learn the capabilities of each other's equipment because the units would often work closely with one another as combined arms task forces composed of both Bradley and Abrams vehicles.

My assessment of the forward support battalion changed as well. It was clear that the training for Bradley maintenance would take longer than I thought due to the sophistication of the new equipment, changes to our logistical system, and the aggressiveness of the training program.

Consequently, as a result of the new equipment training, the brigade required more training than it would have otherwise. With a remarkable support from our communities, families, and the 5th Infantry Division, who has committed approximately 3,000 soldiers

and the bulk of the leadership of the division to the train-up of the 256th Brigade, we are now well on our way to total combat readiness.

We have learned a great deal from the experience and are a much better prepared fighting organization for it. Nevertheless, we will be faced with significant challenges in sustaining a high manning level and current level of training after demobilization.

I do feel, however, that the 256th Infantry Brigade is prepared to meet the challenge levels and are members of the total force. Gentlemen, I, too, appreciate the honor of being here and welcome any questions.

The CHAIRMAN. Colonel Davis.

STATEMENT OF COL. JAMES D. DAVIS, COMMANDER, 48TH INFANTRY BRIGADE, GEORGIA

Colonel DAVIS. Mr. Chairman, distinguished members of the panel, first the mission and relationship.

Since 1974, the 48th Brigade has been a roundout brigade to the 24th Infantry Division at Fort Stewart, from the beginning of the roundout concept. The 48th has trained and operated as the 3rd Brigade of the 24th. As the 3rd Brigade, the 48th has trained on and assisted in the development of various XVIII Airborne Corps and 24th Division OPLANs for Southwest Asia. The 48th has been included in the mission statement of the 24th Infantry Division ever since the division's reactivation in 1974.

The relationship between the 48th and the division has been one of cooperation and a steadfast focus on the total force concept. This has been demonstrated by the many joint training events and opportunities attended by 48th units with the 24th.

Further, an extensive force modernization effort has been made concurrently with the 24th specifically designed to insure that the 48th equipment was compatible with the 24th Division.

The status of the brigade at the time of the 24th Infantry Division employment: At the time of its activation, the 48th Brigade as assessed by the 24th Division was capable of conducting those limited missions that could be expected of a heavy brigade. This assessment was based on training initiatives and plans implemented prior to activation.

For example, the brigade headquarters, 1-108th Armor and 148th forward support battalion, along with an engineer company, completed a successful NTC rotation in July 1990. One mechanized infantry battalion was beginning its train-up for an NTC rotation as part of the 24th Infantry Division rotation for 1991.

The major areas limiting the brigade at the time of activation were weapons systems maintenance, battlefield/unit synchronization and long-term sustainment. Each of these areas had been addressed in the 48th Brigade training program. An additional limiting factor was MOS qualification of low density MOSs.

This was being actively addressed at the time of activation by special schools established at Fort Stewart, Georgia, and the Georgia Military Institute at Macon, Georgia. The schools were referred to as "schoolhouses to the soldiers."

Role of 2nd Army: From August 1990 staff members of 2nd Army, 48th Brigade and 24th Infantry Division began to develop a training scenario for not only the 48th Brigade but other roundout brigades to raise the readiness level should they be activated.

Second Army was instrumental in assisting by resourcing the planned training with instructors and equipment. Second Army, along with the other staffs, refined specific training guidance received from FORSCOM. Further, when the parent division deployed without its roundout brigades, 2nd Army assumed the duties of the divisional headquarters.

The training conducted during this period centered upon individual, crew and leader training. The pace was fast and required that many key leaders be absent undergoing special courses to improve war-fighting skills.

Special courses were also required to assist the brigade's abilities to operate Active Army personnel, logistics and supply systems.

The NTC Rotation: In September 90, the training concept was accepted that the 48th Brigade, if activated, would attend an NTC rotation prior to deployment. Initially the concept was a standard rotation length using the crawl-walk-run method of training. In concept, and later in reality, the brigade would train at platoon level, then company, then task force, culminating in a brigade-level exercise.

During late January 1991, while at the NTC, a decision was made to extend the training there. This would allow the combat arms battalions to undergo more live-fire training gunnery to relieve the deficit in this area from Fort Stewart. The deficit was mainly caused by inclement weather at Fort Stewart.

Across the brigade, soldiers and leaders asked for the opportunity for more gunnery training. Subordinate units were given the opportunity to develop their leadership skills. Support units were given the opportunity to work on long-term sustainment activities.

The leaders responded very positively to all phases of this training as did the soldiers.

The current status of the brigade: As a result of this training and the entire activation process, the 48th Brigade is a more solid, cohesive and professional unit.

In conclusion, the 48th Brigade is now fully capable of performing combat missions expected of a heavy brigade. Further, members of the 48th have a firm base of knowledge to sustain a high state of readiness should it ever be called upon.

Thank you, and I will answer any questions, sir.

STATEMENT OF COL. FLETCHER C. COKER JR., COMMANDER, 155th ARMORED BRIGADE, MISSISSIPPI ARMY NATIONAL GUARD

Colonel COKER. Mr. Chairman and distinguished members of the panel, I will not go over the pre-mobilization process that the 155th Armored Brigade went through. It compares favorably with the comments of General Whipple, so I will dispense with that.

Since 1983, the 155th Armored Brigade, Mississippi Army National Guard, of which I have the honor of being the Brigade Commander, was the "roundout" brigade to the 1st Cavalry Division, Fort Hood, TX. The 1st Cavalry Division was alerted in August

1990, and in early October finished deployment to Southwest Asia. The Tiger Brigade, 2nd Armored Division, Fort Hood, TX was deployed as the 3rd Brigade of the 1st Cavalry Division in lieu of the 155th Armored Brigade.

Subsequently, the 155th Armored Brigade was mobilized on 7 December 1990 and trained at Camp Shelby, MS through 28 December 1990 at which time the Brigade moved to Fort Hood, TX and was assigned to 4th Infantry Division.

Maneuver training at Fort Hood, TX continued from 31 December 1990 through 18 January 1991. The gunnery phase of training commenced January 22, 1991, and continued through February 28, 1991. The Brigade is now deploying to the National Training Center, Fort Irwin, CA, where it will conduct intensive maneuver and gunnery training from the period 10 March 1991 through March 22, 1991. We will then be ready for demobilization.

The mission of the 155th Armored Brigade prior to mobilization was: 155th Armored Brigade will mobilize, move to mobilization station, train up, deploy, unload basic load, move through the marshalling area to occupy staging area, task organize for combat and execute missions assigned by CAPSTONE Commander.

The revised post-mobilization 155th Armored Brigade mission was: Train to achieve brigade-level proficiency in preparation for war, by successfully completing maneuver and gunnery training at Fort Hood, TX and the National Training Center, Fort Irwin, CA. Be prepared to deploy to Southwest Asia or Fort Carson, as the Third Maneuver Brigade of the 4th Infantry Division [Mechanized].

Mr. Chairman, the 155th Armored Brigade has four maneuver battalions, 2 Mechanized Infantry and 2 Armored. Three of the battalions are from Mississippi and the fourth, 3rd Battalion, 141st Infantry, is a Texas Army National Guard Battalion that also rounded out the 1st Cavalry Division.

In addition to the maneuver battalions, the 155th Armored Brigade has one artillery battalion, one engineer company, one cavalry troop, and one support battalion, which were attached to the Division base (Division Support Command, Division Artillery, etc.).

On the date of mobilization, there were 438 personnel not mobilized. Their status was as follows: Individuals who had enlisted but had not yet departed for basic combat training was 109. Eighty-five percent were high school students that had either gone through basic training and had not gone to individual training or had not departed yet for either of those training periods. If they were 2nd lieutenants that had been commissioned as part of the simultaneous membership program, but had not yet graduated from college and thus had not attended the officer basic course.

Under the present system, there will always be this approximate percentage that are allowed to enlist into the National Guard but cannot be mobilized until their training is complete.

Of the 3,938 who were mobilized, 86 were identified at Camp Shelby as nondeployable and as of 1 March an additional 157 at Fort Hood for a total of 243 or 6 percent of the mobilized strength. I am told this favorably compares to the active duty brigade, the mobilization percentages.

At this time the Brigade has 290 assigned officers, 14 assigned warrant officers and 4,085 assigned enlisted personnel.

As of March 1, 1991, the operational readiness status of the 155th Armored Brigade was 92 percent. This was not corrected for over a week after our arrival at Fort Hood.

Major issues identified during mobilization were as follows:

The roundout concept for the brigade was abandoned when the 1st Cavalry Division was mobilized without the 155th Armored Brigade. From the date of the alert of the 1st Cavalry Division until shortly before the alert of the 155th Armored Brigade, the division CAPSTONE alignment was unknown. This was and continued to be a significant detriment to morale.

The 155th Armored Brigade had no previous working relationship with the 4th Infantry Division. Although the 4th Infantry Division had no previous knowledge of the 155th Armored Brigade, the Division Commander and his Assistant Division Commander worked long and hard to assist the brigade. They made us feel we were a part of their team and they are to be commended for this, sir. Especially during gunnery, 410 soldiers rendered invaluable assistance to us, resulting in the qualification of all crews, both tank and Bradley.

There were equipment shortages within the brigade which adversely impacted training, i.e., nuclear, biological and chemical equipment, communications equipment, cold weather clothing, and night vision goggles.

In spite of these, the 155th Armored Brigade has done many things well.

The brigade moved 1333 pieces of equipment 750 miles from Camp Shelby, MS to Fort Hood, TX, by both road and rail without incident during the period December 26 through December 30, 1990 and is conducting a similar rail move to the National Training Center.

The brigade and battalion staffs successfully completed Tactical Commanders Development Course training at Ft. Leavenworth, KS. This was by far the best staff training received.

The brigade successfully conducted maneuver training during the period December 31, 1990 through January 18, 1991.

The brigade has sustained itself from December 7, 1990 through the present time.

The AWOL rate for the brigade has been very low (.002). There have been few disciplinary problems.

Of 3,938 mobilized, only 243 or 6 percent are now nondeployable.

The great majority of individual soldiers were highly motivated and displayed a high level of esprit.

The brigade has established an excellent safety record with few accidents and minimal man hours lost.

The morale of the men and support from the people of the States of Mississippi and Texas has been outstanding.

Lessons learned regarding any future mobilization of the 155th Armored Brigade are as follows:

A mobilization plan should be developed with defined deployment criteria and followed as closely as possible. Mobilization should be preceded by extensive coordination between the leadership of the brigade and the parent unit.

Administrative and medical screenings performed within 90 days of mobilization by the State headquarters were redone. Approximately 21 days could be eliminated in the post-mobilization process by accepting Common Task Testing, administrative and medical screening, and individual weapons qualification at least for headquarters elements performed immediately prior to mobilization.

In conclusion, the officers and men were mobilized on December 7, 1990 and have trained continuously, 7 days a week. They have maintained a positive attitude under adverse weather and difficult circumstances. Their performance and attitude has proven that the citizen soldier concept is alive and well. The 155th Armored Brigade was and is fully capable of performing its assigned mission.

Mr. Chairman, I consider it an honor to appear before this committee and like my companions in arms am prepared to answer any questions you might have.

The CHAIRMAN. Thanks to all of you for your presentations this morning and for being so helpful in talking to us about this. There are a number of people who have questions, and I won't take a lot of time, but there are a number of areas that I am interested in and we will follow up on other questions and take time at the end.

As we were saying, a number of us looked on this callup as part of Desert Storm as an important test of the system. Frankly, I was a little disturbed at what the tests showed. I think we have some serious problems and serious weaknesses that the tests showed, and part of our reason for talking to you here today is to find out your ideas about how to make it better.

I think we have some problems in terms of the training, the readiness ratings, the way we select and train leadership in these combat units. It seems to me that there is clear evidence that the combat support, and I am interested in the combat support, following further on General Conaway's comments about the two artillery brigades, because we have not looked into that and would be interested in following up on those brigades.

Let me begin, and then I know that Sonny Montgomery and Bev Byron and Ike Skelton have questions, too.

Why did it take so much longer to get the brigades ready to be deployed than we had been led to believe? We have been for years hearing it was maybe 30 days worth of post-mobilization training before deployment, and we ended up with about 3 months. Why does it take so much longer than we had thought? Anybody.

General BURBA. I think that the 30-days was a goal. We didn't know until we had a mobilization exactly how long it would take. The general war reinforcing missions that these brigades were oriented on would give you more time to mobilize, and conduct post-mobilization training. Those contingencies would give them more time for training.

This no-notice deployment on the first day of the crisis associated with the Desert Storm situation was the first time we have run into a crisis where we had to deploy heavy forces literally on the first day of the crisis. We have had to deploy light forces that quickly before.

The CHAIRMAN. The roundout units didn't get called up until November, after Congress extended the time. I mean, the actives had

to go on the 6th of August, but the others didn't get called up until November, and then it took 3 months.

General BURBA. Yes, sir. My point is that the emerging environment of warfare now is reducing the warning time and the response time. We need to review the roundout concept for that reason. We had more time previously with the type of scenarios that we were dealing with.

But that doesn't mean that the concept no longer has application. It just means that they won't go on the first day, the first week or possibly the first month. But we are always going to have the early reinforcing divisions to play in those type scenarios.

The initial divisions will stabilize the situation, you won't lose but you won't win. You would have to reinforce them with other divisions.

The CHAIRMAN. Are you saying then, General, that in the future we ought to plan on 90 days, 3 months of post-mobilization training for any roundout units that we have in the force?

General BURBA. I wouldn't say 90 days, sir. The goal is still 30 days. We learned how we can train better before mobilization so we go in at a higher readiness and how to peak up that readiness quicker.

So I am not prepared to say how long. It took 90 days in this case, but we learned a lot and we could probably work on that.

The CHAIRMAN. General Conaway.

General CONAWAY. Obviously, it has basically been since 1950 that we have done this type of a major call-up of large brigades and had to get them ready to go. The new equipment training they required, being mobilized in the month of December with the bad weather and the holidays and the movement to the places they had to go, all contributed. When you factor that in, we have talked about how we need to cut down on this time and the movement from one base to another. You lose a few days or a week every time you do that.

You probably can do this with us making some slight adjustments in our course, in the training that we do, in the 39 days that we have, and determine if that is enough. If not, we may need to be resourced higher than 8 percent full-time manning in these units, we may have to be resourced at higher than 39 days training. We like to get 3 weeks annual training where we can.

For the resources provided—Congress has given us great equipment and they are training on it—and with the amount of training days, they have done well. When we fine tune some of our maintenance training and our gunnery training and work closer on both sides, the divisions and the readiness groups that the Army has with us, and maybe more advisors—although the Army strength is ramping down like we are all supposed to ramp down, a ramp that is probably too steep for the total Army, more advisors on top of our technicians and AGRs could help us, too.

We have had a reduction of advisors from 2,000 in the late 1970s in the Army National Guard to less than 500 today. There is a plan to replace some of our full-time military manning with active Army personnel. That doesn't really help us that much. We could use them if you want us to maintain this high readiness because we have only 8 percent to begin with, so put them out there above,

instead of in lieu of, where you have to lay off someone. These gentlemen come from local communities and it's not wise to replace them with someone moving in.

These brigades will be ready to go on very short notice now that they are up on required training.

The CHAIRMAN. Let me talk about some suggestions we have got. One is flat out the statement that in fact you can't do it, that in fact given the training time available to reservists—this has nothing to do with ability or dedication—given the fact that you have weekends to deal with it and a couple of weeks in the summer, you can't expect to get big units, brigades or something like that, even at division level, that you can't do that, that in fact it is just because of the fact that people are too far away from good training sites, you can't maneuver—so there is just no way that you are going to be able to reduce the amount of time that you are talking about after mobilization.

In other words, I guess they are saying we either learn to live with the 3-month notion, or 3 months isn't adequate, we think of another way of doing it other than through Guard units.

What is your reaction to that? In fact, given the time constraints and the fact that Guard people are drilling only a certain number of days a year, that you just—and given the time to travel and the inaccessibility of enough space to train in, that you can't do big units?

Mrs. BYRON. Mr. Chairman, can I add a question on to your question, and that is that as you saw our troops deploy the 1st of August, and your units were not called up until after the commitment was made for combat units in November, and then they were not called up basically I think until 7 December, what did you do from August to December with the thought that you probably might be, hoped to be, wished to be called up?

Did you increase the training of those units, did you do anything to get those units a little bit more proficient during that August to December time frame?

General WHIPPLE. I would like to speak to your question, Mr. Chairman, and yours, ma'am.

Yes, we can cut the training time down, but there has to be a recognition that we have to set whatever level of expectation there is and then resource that. I really believe that you could cut down significantly the post-mobilization training time if you recognize that a combat brigade had to be at a level of, say, platoon maneuverability with the gunnery sustainment program that is resourced both in the maintenance area, not only in types of maintenance equipment but also in the automated systems that we didn't have prior to mobilization.

We could do that. Then upon mobilization, all of the initial 2 months of the program could have been eliminated had we been at that level. We weren't because we weren't resourced at that level.

In addition, the 256th Brigade had just begun the modernization program, so you have to consider the fact that we weren't supposed to finish the Bradley new equipment training until 1991. That is not the case with the 48th and the 155th, but if you look at the roundout concept you have to consider that.

After August—as a matter of fact, when August 2nd happened, the 256th Brigade was at its annual training program. We began immediately looking at those skills that we could do during IDT at home station to improve the brigade. We did a lot of common task training, a lot of nuclear, biological, chemical training, so we were doing those things that would help prepare us for possible mobilization.

Colonel COKER. The statement that the National Guard, “Just can’t get there from here,” is just not true, sir. We can. We have. As General Conaway said, we haven’t done this in the last day or two and we learned some things, and certainly we hope that this knowledge is not lost on our successors, that they learn from this and shorten the time.

I consider that a great majority of the first 21 days that I spent on active duty could have been eliminated by doing exactly the things that Congresswoman Byron suggested. What did we do between the time we got alerted and mobilization? We did a lot of those things but were operating in somewhat of a vacuum, because we didn’t have a good feel as to what would be expected of us if and when we were mobilized.

I didn’t know where I was going or with whom I would be associated. We did a lot of common task training, chemical training, individual weapons qualifications to do the best we could to get ready. The key, in my judgment, would be for everybody to know exactly what the post-mobilization training will consist of so that early on and as the tensions build up you have the flexibility to change your individual training program to make sure that you concentrate on those things regardless of whether it falls in the cyclical nature of the training of a National Guard unit, sir.

Colonel DAVIS. I believe the 30-day goal is not unreasonable. We have to change the way we do business. Our plan is to have three annual training (AT) periods a year. We will have 5 weekdays in three increments. It will give us three 9-day periods.

IDT training is hard to get a lot of value out of. We are going to dedicate two of those three AT periods to gunnery. Somebody came up with the notion of doing Bradley gunnery on the weekends, so we are going to do gunnery twice a year and maneuver on the third annual training period.

If we could have more dedicated full-time employees as well as directed funds—by that I mean when it is time to go to NTC, which remains the best training in the world, I think, short of combat, we have to be funded outside of normal State funding and budget. When we took the 48th Brigade to the NTC in July of 1990, we ended up competing with the three others in the State for funds, and the funding package was not adequate to begin with.

I think that is wrong. It will work and we can go in 30 days, but everybody has to be dedicated to doing that, including you.

The CHAIRMAN. Bill Dickinson.

Mr. DICKINSON. Thank you, Mr. Chairman.

The Chairman and I and other Members of Congress were in Saudi Arabia I guess in September. We had been called up about a month. The Chairman and General Montgomery and others were rather insistent and were questioning General Schwarzkopf rather pointedly about why don’t we call up the Guard and Reserves, the

combat units. All you are doing is backfilling, and you are calling up these units that all they are going to do is backfill and be support. Why don't you call up the combat units, improve the concept.

General Schwarzkopf said, well, to be honest with you, we can only call them up for 90 days and extend them for 90 days, and they require x number of days to get ready once they are called up, because they have to learn new techniques, learn to deal with new equipment and so forth.

Then we have a logistics challenge to get them here, which means that they have a limited appearance in theater. At this time and with our limited logistical capabilities for the short time that we are able to use them, they had decided against calling up the combat units.

That meant that we would have to look at changing the law, and the law was changed. I introduced an amendment to our bill that did not pass, and then the appropriators put something on their bill to extend the time, for which we had no hearings or anything, and I don't even know really what the law provides now, so maybe you can tell me, General Burba.

You can call up the reserve units for how long and extend them for how long? Is it 2 years now?

General BURBA. 360 days. I believe that appropriations bill was limited to just the Desert Storm crisis, if I am not mistaken.

Mr. DICKINSON. You see, we have to take a look at this to see is this something we want to put into permanent law and how well did it work. Nobody anticipated it would come to the short duration that was needed. Is it 360 days now that they can be called up?

General BURBA. You can extend it for 360.

Mr. DICKINSON. That is what I am asking you: It is 2 years?

General BURBA. No, sir. Call-up authority was for 180 days with a 180-day extension for a total of 360 days.

Mr. DICKINSON. Is that what we need? You see, if this is limited to the present emergency situation, I assume that we need to study what should be put in permanent law, because if 90 days active and 90 days extension is not adequate, then what is adequate? Perhaps we ought to do something about that in this current budget cycle.

Do you have any recommendations on that?

General BURBA. Sir, certainly for this crisis that extending the duration was a good call; and I would presume for other crises that might develop in the current international environment that seems to be developing, that that would be a good call.

Now, I am less familiar with the domestic political implications of all that.

Mr. DICKINSON. I am talking about what we need.

General BURBA. Yes, sir, we need that.

Mr. DICKINSON. Do you think capability of calling up for 360 days with a 360-day extension, that that is what we need and should be put in permanent law? Would you agree with that?

General CONAWAY. I might add that you have the partial mobilization, that is one million men and women for 2 years, which we are under now. Prior to that, to 24 August, we were under Presidential call, 200,000 men and women up to 90 days with the President's authority to tell you he would like to extend it for 90. The 90

plus 90 is a problem, because it is hard to touch large maneuver brigades that need 30 to 90 days of post-mobilization training; also, at the time they weren't sure they were going to extend the Guard and Reserve.

If there were a flat 180 days or 270—you have to watch how much you extend the Presidential call, because a partial mobilization is important. The partial mobilization allows the Army and other components to get to the individual ready reserve, which is needed when you call the very large units because to cross-level them and pick up some skills—

Mr. DICKINSON. I think from what you have told me that permanent law is not adequate and it should be addressed, and I am sure we will get to hearings later to determine as far as permanent law what we should do to change.

General CONAWAY. On the Presidential call and partial mobilization, I think you are all right on. You have full mobilization next after that, like we were called up in 1940. The 90 days restricted them because they would like to have called these three roundout brigades immediately and put them into post-mobilization training. The 90 plus 90 was awkward.

Mr. DICKINSON. What is on everybody's mind right now is when are you going to demobilize?

General BURBA. Sir, the Army's plan at this juncture is for the 48th, the Georgia and South Carolina Guard, to demobilize in mid-April, and the other two brigades who are later in their training program, because we can only get one brigade into the NTC at one time, would be 2 weeks later. That is the plan—not approved yet.

Mr. DICKINSON. As I understand it now, we are not planning to rotate Guard and Reserve troops over to bring the active duty troops and other in-theater units home, am I correct there? We are not planning to continue to send those that have not gone to Saudi Arabia or the theater over while we are bringing others home, are we?

General BURBA. There are no plans in that regard, sir.

Mr. DICKINSON. We are proud of our Guard and Reserve and we want them to be what they are supposed to be, and we don't want them to be considered a retirement plan or an educational plan, but we want them to fulfill the functions for which they were organized.

When we have problems with both parents, for instance, being in service with young children, what do we do about that? What about nursing mothers? A lot of problems have surfaced that probably ought to be addressed later that I think some correction should be made.

All of us are very proud of the Guard and Reserve along with our active. They really performed exceptionally well.

The one thing I can draw from what you have said is you could be called up sooner and be ready sooner if we gave you the equipment and the money for the training and the equipment to do it with, and really it is up to us as to how much we are willing to pay for you to be at a higher rate of readiness. So OK, I got the message there.

Thank you, Mr. Chairman. Thank all of you for your appearance.

General CONAWAY. In fairness to appropriations, when you do that we then have to have the sealift and the airlift to get them there within the period of time that you need them trained and ready to go.

Mr. DICKINSON. Seems like I have heard that somewhere else.

The CHAIRMAN. I think if we are going to do that we are going to need some assurances from you guys of some reforms that need to be done in terms of training, selection of leadership and other things in exchange, because I think you are right that both of these things are part of the overall problem. We need to make it better.

Sonny.

Mr. MONTGOMERY. Let me point out for the record that these brigade commanders, they have combat experience and also they have command experience, and they are citizen soldiers.

Looking at the resumes, General Whipple is a professor in a Louisiana College; Colonel Davis is an engineer; Colonel Coker is in the mobile telephone systems; and they were called to active duty.

Colonel Coker, on mobilization of the 155th Armored Brigade on December 7th, what would you have preferred in the callup of the mobilization?

Colonel COKER. Certainly, Congressman, I would have preferred to have been called up with my parent unit, the 1st Cavalry Division. We had been with them for a number of years, been assured we were part of their team, that they considered us vital to the accomplishment of their mission. We were included in their war plans. When that did not happen, as I stated earlier, it was a devastating blow to the morale of everybody in my brigade from myself on down.

In my judgment from where I sat, without regard to the legalities or the decisions made at echelons above my command, what is good for my brigade would have been for us to have been mobilized shortly after the 1st Cavalry was alerted, to have been allowed to conduct our post-mobilization training with the 1st Cavalry Division and then be the last of their brigades to have deployed, which is what my original mission was to be.

My mission was to be the follow-on brigade of that division. If we could have been mobilized and had even the same amount of time to train as we have had now, and we could have deployed shortly after they finished their initial deployment and joined them in Saudi Arabia, that would have given my troops a clear focus as to what they were being called upon to do.

For all our good intentions, the way it worked out, I had a difficult time in truly explaining to my troops exactly what it was that they were about now. I got questions, why didn't we go with the 1st Cavalry, Colonel, and what is going to happen to us now. We were kind of like orphans for a little while until the 4th Infantry Division came along and picked us up.

Mr. MARTIN. Would the gentleman yield?

We understand your frustration and what that would do to the morale, but at that time when the 1st Division was notified, under the law at that moment, the only length of time your troops could have been activated was for 90 days and a possible 90-day extension, which would have been kind of a silly call, because for all you

knew by the time you got trained and shipped over it would have been time to hurry to get you back home.

If we had the law 360 and 360, I think a different call would have been made.

Mr. MONTGOMERY. That is not exactly right. No question they could be called up, and the Defense Department and Secretary Cheney knew this, all he had to do was request the Congress and we would have done it. Bill Dickinson wanted to do it and it was not a problem. Could you have taken those troops over there and not worried about endangering their lives, by the time you got there you could learn more. The 1st Cavalry has been training ever since it got there; is that correct?

Colonel COKER. That is my understanding. To answer your question, the last thing I or my commanders want is to put our people at risk unnecessarily. I certainly would not be placed in a situation of doing that.

But I do feel like that within the time frame that we are talking about, and to some extent it might well be Monday morning quarterbacking since there was time to continue training once the units arrived in theater, but even given the same number of days of training that I have had now, clearly, in my mind, we could have deployed and accomplished my mission and been a viable asset to the 1st Cavalry Division.

Mr. MONTGOMERY. I have two or three more questions. I am aiming at Colonel Coker because this is part of my congressional district the 155th is from.

As you trained up, what would be the window you would think, if you get all your equipment and have your night vision goggles, your chemical equipment, how long would it take you now, you think, on post-mobilization to be ready to move out?

Colonel COKER. I think that a window of 30 to 60 days would be reasonable and attainable, depending on what level you wanted me and my unit to be upon deployment. If you wanted me to be 100 percent, something closer to 60 than 30. If you wanted me somewhere around the 90 percent or something like that, it would be close to 30 days. It depends on the level of training you want; but as near as we could be to combat ready in every aspect, knowing what we know now, somewhere between 45 and 60 days would be the optimal window.

Mr. MONTGOMERY. You have been training mainly at Camp Shelby, and since now you have been to Fort Hood and moving to the NTC. What changes need to be made at Camp Shelby to be an armored brigade, a National Guard command center?

Colonel COKER. One of the big surprises to me in the conduct and level of training of my unit was in the area of tank gunnery, Congressman. We had been firing our tank gunnery at Camp Shelby for a number of years and had been doing extremely well under the watchful eye of the 1st Cavalry. They would send mobile teams over and assist us and we were qualifying crews right and left.

The problem was the ranges at Camp Shelby are very narrow and shallow in depth, lots of pine trees, and the crews in effect memorized the range and knew where the targets were. When we got to a desert environment such as Fort Hood and moved into an area 4 kilometers wide and 3 kilometers deep, it was a great shock.

To answer your question, we need a place that replicates as much as possible the environment under which we would be fighting.

Mr. MONTGOMERY. How about maneuverability at Camp Shelby, what is the largest unit you can maneuver?

Colonel COKER. We could force it and get a company, but ideally a platoon is just about the biggest unit that you can freely maneuver on Camp Shelby as presently configured. Steps have been underway even preceding Operation Desert Shield/Desert Storm to improve on that, and I encourage everybody involved to make sure that does happen.

We need wider ranges, more complex ranges, and more maneuver space, yes, sir.

Mr. MONTGOMERY. I want to commend the Army, that I have been twice watching the training of these units and I will visit with General Conaway, the 155th during their tank testing and maneuvering at Fort Irwin. The Army has helped, they brought in their best people to work in finding ranges, maintenance of these brigades, and I want to commend you for it.

I am a little concerned, though, I know you rated the 48th and the 155th, as ready to move out within 30 days of mobilization. They came up to that rating; is that correct?

Colonel COKER. Sir, I have been rated combat ready for about the last 2 years. Then we progressed in our training, and immediately prior to mobilization we had greatly improved upon that in terms of days required to train.

Mr. MONTGOMERY. You substituted a training brigade at Fort Benning, Georgia, the 197th, I believe, for the 48th. What was their C rating, General Burba?

General BURBA. Sir, I don't recall at this time. The 197th is not a training brigade, it is a full-up brigade—it is at Fort Benning, Georgia and participates in some of the training the school requires. It is a full-up TO&E brigade.

I will get the rating for the record.

[The following information was received for the record:]

C-RATING OF THE 197TH BRIGADE

The C-rating for the 197th Infantry Brigade upon deployment was (deleted).

Mr. MONTGOMERY. What about the brigade activated, the 2nd Armored at Fort Hood. I want to compare—you have to be fair to these units. Were the units that replaced them up to standards of the brigades you didn't take in the National Guard?

General BURBA. I will have to give you for the record.

[The following information was received for the record:]

C-RATING OF THE TIGER BRIGADE

The C-rating for the Tiger Brigade of the 2nd Armored Division was (deleted).

Mr. MONTGOMERY. I just think you have to be fair with it. If you left these other units home and you took a unit out of the regular Army, they probably had no higher rating; that was all I was trying to find out.

General BURBA. Any objective criteria on a piece of paper will never substitute for a judgment of the commander on the ground

who sees the unit's training, and that is absolutely no denigration whatsoever of these great brigades here, because they are as well trained as I or anyone else in the Active Components could train them. It is a matter of time, how long it takes to get them ready to go to war.

Mr. MONTGOMERY. I asked General Schwarzkopf why these units weren't called up, and he told me the Defense Department didn't put them on the list. I said to General Schwarzkopf, the Defense Department told me you didn't request them. So that is the way it ended up.

Thank you, Mr. Chairman.

The CHAIRMAN. Ike Skelton.

Mr. SKELTON. Thank you, Mr. Chairman.

General BURBA, out of the whole experience in the Middle East a lot of people are receiving accolades, particularly those who planned and executed the campaign, and I think that you should take a major bow for being the one who chose and supplied the forces and made the decisions to put the various divisions over there for General Schwarzkopf, and you should be complimented for that, sir.

There is an old cigarette ad, General, "Comparison Proves." I would like to compare what we have seen in the readiness standards of these combat Army National Guard brigades with the combat standards of the U.S. Marine Corps Reserves. The Marine Corps has a reserve division, nine battalions were called up for active duty, all placed in active duty slots, two in Twenty-nine Palms, two battalions in Okinawa, one battalion in Norway, four with the Marine Expeditionary Force in Southwest Asia.

I might also say that they saw active duty combat. Many of them distinguishing themselves. Charlie Company out of Boise, ID, in the 4th Tank Battalion, in a 15-minute skirmish destroyed 60 Iraqi tanks. That is a Marine Reserve company.

Now, obviously these brigades were not called to active duty and deployed because they were not ready; is that correct, General BURBA?

General BURBA. Sir, they originally were not called because of the short notice and short fuse nature of the contingency. We thought that these heavy divisions would immediately be deployed and be in combat on day 1. We did not feel these brigades were ready for that lethal uncompromising environment, given the amount of training they had.

The other complicating factor was the 90-day limitation.

Mr. SKELTON. After they were called up there were problems encountered?

General BURBA. Not problems, realistic training that had to be accomplished to bring them up to combat readiness.

Mr. SKELTON. They were individual skill deficiencies, is that not correct?

General BURBA. That is correct.

Mr. SKELTON. Lack of leadership proficiency; is that not correct?

General BURBA. Yes, sir.

Mr. SKELTON. Key personnel shortages, is that not correct?

Mr. MONTGOMERY. Why don't you let the brigade commanders answer.

General BURBA. It is true that there were key personnel shortages, but this was not an overriding problem with those units, and we also experienced some of those problems in Active Component units. The only problem that those brigades had was a lack of training time.

Mr. SKELTON. In your opinion, how long would it have taken to get these brigades ready maybe on an individual basis or collective basis for deployment to the Middle East from the moment they were called up to the moment they were deployed?

General BURBA. Ninety days was their training program. At that juncture, with the 48th Brigade, I validated them as being combat ready, but we can do better than that based on what we know now.

Mr. SKELTON. One of these brigades had a major AWOL problem; is that correct?

General BURBA. They had a problem, sir; I wouldn't call it a major problem. I think at one point some percent of the brigade went AWOL—I might add that that brigade is a very fine brigade, and again I would hate to see that paint that brigade as having major problems, or major leadership problems.

They did not. They had some young soldiers who hadn't been through the militarization, socialization experience, impressionable young men who went AWOL, but it was not an overriding problem with that brigade. It has good leadership and it is a good brigade, in my judgment.

Mr. SKELTON. When we get back to comparing the nine battalions of the Marine Corps and the National Guard—I might say that there are some National Guard units that did see active duty and should get laurels for what they did, the West Virginia, Kentucky units, the combat units and combat support units performed superbly. I am speaking only of combat units, and my questions are limited to that.

In the Marine Corps, is it not true that there are a sizeable number of active duty officers and experienced noncommissioned officers working as instructor trainers with each company and brigade in the Marine Corps?

General BURBA. Yes, sir, at company and battalion level, and regimental level.

Mr. SKELTON. That of course is not true in the National Guard combat units, is it?

General BURBA. No, sir, it is not.

Mr. SKELTON. Another difference is in the source of commission of the officers. As a matter of fact, with the active duty Army as well as the Marine Reserves, your source of commission may come from a military academy, from ROTC or from OCS, in the Army case Fort Benning. In the National Guard you have 48 different OCS operations in 48 States; is that not correct?

General BURBA. Yes, sir, that is correct.

Mr. SKELTON. Do you find as a result of the different OCSs there are different levels, different standards of officers coming out of them?

General BURBA. Yes, sir. Some are quite good, I might add, though.

Mr. SKELTON. Some that don't measure up?

General BURBA. I wouldn't say they don't measure up. I will say there are differences between the programs.

Mr. SKELTON. So what are your recommendations then, General, to bring the combat units of the National Guard up to where you would like to have had them on the shelf as you chose the various battalions, brigades and the divisions to become part of General Schwarzkopf's forces?

General BURBA. I think the full-time manning is a very critical issue. We have a very comprehensive structure that we have in our Guard and Reserve units—300,000 Army Reserve units, 450,000 Guard units plus or minus. I believe in the Reserves we are at about 7.7, 8 percent full-time manning. In the Guard I think it is up near 13 point something percent. I don't think that is adequate. I think that that is one area that we need to improve.

Mr. SKELTON. Would you cause those to be active duty personnel from the Army?

General BURBA. If they could be.

Mr. SKELTON. Is that your preference?

General BURBA. That would be my preference. There is a major affordability issue there. I might also add that there are other ways to do that through military technicians, through the AGR program, through augmentee-type programs that would also work.

Mr. SKELTON. General Conaway, do you have any recommendations you would like to make to the committee on making the combat units—please understand, the others, those that are deployed, wherever they are and wherever they went, performed superbly. I am speaking about combat units in preparation to go along with the 1st Cavalry or the 24th.

General CONAWAY. We have to watch that. Those 40,000 or 20,000 that flowed up into combat and fired their artillery, there are going to be some great stories coming out of that. Maybe our PR is not as good as the Marine Corps, but we are going to work on it.

Mr. SKELTON. That is probably the understatement of the day.

The CHAIRMAN. Somehow the National Guard's problem I don't think is the PR part of it.

General CONAWAY. Our full-time manning, sir, we can use more full-time manning in the Army National Guard in these higher priority brigades. We have never been against active duty personnel integrating with us. We would like to do that. The big debate came when part of what full-time manning we have was going to be taken away on a one-for-one basis. If you could stabilize our technician and AGR manning where it is and not take away one to put one in and put some on top of that, and it may not take much. The Army ready teams do a great job in helping our units.

It is apples and oranges comparing 5,000-person brigades with a straight-legged battalion. We have those who are ready to go, too. I think the Army National Guard is as ready as any of the other ground reserve components that are there, and I think the Army does a super job working with them.

We are talking about, I think, a different thing here. The officer candidates that we have discussed, about 40 percent of those come from our State officer candidate schools. The rest from ROTC, prior service, the whole mixture.

With the Guard in practically every hometown, we can't keep our officer strength up. We have not been able to without State OCS schools. At your urging, we are consolidating some of these. We have Illinois, Wisconsin, Iowa, some States are going to go together now; we have a school near Camp McCoy in Wisconsin two or three States can go to. We will probably do more of that where we can. We think they have a very good product.

Ironically, our retainability is highest because they are in the area and they stay there.

Mr. SKELTON. I think we are looking at high standards wherever we are from.

I don't want to eliminate each of the three brigade commanders commenting on their recommendations as you other two gentlemen have. Do any of the three of you have comments?

General WHIPPLE. I hate to keep singing the same song, but I think that the generalization that has been made that it takes a great deal of time to train the combat roundout brigades has to take into consideration the premobilization status that they have to be in. We were not, for example, in the 256th scheduled to complete the modernization program until 1991. People had just been introduced to a Bradley fighting vehicle. That is a very complicated piece of equipment. You don't just learn the fundamentals of that piece of equipment in a 2-week annual training program.

Consequently, I think that any consideration of what has to be done post-mobilization has to take into consideration the pre-mobilization status. To do that, decisions have to be made with regard to laws, regulations, and policies as to what type of force you want. If you want a 60-day force you have to pay for that.

That means we no longer substitute M-578s or M-88s for towing vehicles. These are some of the very specific things that have to happen there. Those things cost a lot of money, sir.

Mr. SKELTON. Congressman Montgomery year after year has done a superb job in earmarking a surprisingly large amount of equipment for the National Guard and for the Reserve, otherwise I think you might not be close to where you are today.

General WHIPPLE. Yes, sir. That does not change the posture of a unit that comes on active duty that is short these pieces of equipment, and that is the pre-mobilization status that I am speaking of.

Mr. SKELTON. Thank you.

Colonel DAVIS. Sir, we had active duty soldiers in the Georgia Guard a long time ago, in the early 1980's, little by little there, as an emergency would come up around the world we would attrit those guys. We would welcome active duty soldiers in the brigade. That is not a problem.

I still maintain we can put the 48th Brigade on a boat in 30 days, but it is going to take funding. It is going to take full-time employees specifically in maintenance, and to a degree, in gunnery. A whole lot of good patriotic citizens out there have worked very, very hard, and withstood a 60-day NTC rotation, and they are very capable.

The fact that we weren't called early is something maybe we can learn from, but I maintain 30 days.

Mr. MONTGOMERY. Would the gentleman yield?

Mr. SKELTON. You bet.

Mr. MONTGOMERY. So that Colonel Davis will know where this is driving from, there is legislation that is now law that says within the next 5 years 30 percent of your AGR's in different brigades and your brigade will have to be replaced with active duty personnel who will come in for 2 years, and you eliminate those AGR's.

I am asking you, do you want to keep your AGR's or do you want to switch the regular Army people in there some?

Colonel DAVIS. I would prefer to have both, sir. I can tell you that we would much prefer the AGR program be continued rather than putting in active duty personnel. These people get into a local community, get the support of the local community, build a unit by knowing the people in that unit and part of the strength of the National Guard, a great part of the strength of the National Guard is the fact that we have that continuity with these AGR programs.

Mr. MONTGOMERY. Colonel Davis, you used to have advisors that use to be over 5,000 in your Army National Guard. I think it is down to one or two thousand regular Army advisors. That is what worries me.

Colonel DAVIS. I had a battalion at that time, an infantry battalion. My mortar platoon sergeant was an active duty sergeant, very, very capable, a big help to me. That is the full-time assistance we need, active duty assistance we need. We don't necessarily need a lot more advisors.

We need people who are going to get into slots and help us learn to fight, master gunners, maintenance people, people who can address our shortcomings.

Mr. SKELTON. Mr. Chairman, let Colonel Coker comment, then I am through.

Colonel COKER. Congressman, I would like to make two comments. One, the AGR Program is a vital part of our resources, and these AGR soldiers and officers are required to attend Active Component schooling, professional development courses, and this type thing along the same guidelines, I believe, as the Active Component soldiers and officers of have comparable ranks, and these—the point is well made that in addition to being qualified, these individuals are members of the community, and they render us a valuable service in recruiting and in the training of our units, and they are part of us.

At the lower levels of soldier and NCO level, I think it would be extremely difficult for an Active Component E-4 or an E-5 individual to come into a National Guard tank company or a National Guard rifle company as that unit's armorer, for example, and fit in and perform. I think it would cause him financial hurt probably, depending on where he came from, and I would not as such recommend it.

The other comment I would like to make, Congressman, is on your statement about source of commissioned officers. Since you made that comment, I have been sitting here trying to think, evaluating my officers and then trying to match source of commissions, as I know them, with that, and I am unable to find any correlation.

I have officers who are West Point graduates. I have Officers who are Regular Army OCS graduates. I have officers such as myself who are ROTC graduates, and I have some State OCS graduates, and in my judgment, across the board, I am positive that I

cannot say that the West Point graduates perform universally better than the ROTC graduates or vice-versa.

I think maybe I am blessed with one of the better State OCS programs that the general was mentioning, but I think it would be a mistake to say that the inactive, the Reserve Components are incapable of training junior officers because I believe given the right atmosphere and program that it clearly can be accomplished, sir.

Mr. SKELTON. Thank you very much.

Thank you, Mr. Chairman.

The CHAIRMAN. Dave Martin.

Mr. MARTIN. Thank you, Mr. Chairman.

Mr. Chairman, I want to take just a minute, if I could, as we are talking about this Total Force Concept and the integration of the Guard and Reserve with the Active Component, and get the attention of the gentleman from Mississippi. I want to commend him because there is no one who even is in close second place to the efforts of the gentleman from Mississippi from the time I came on this committee in supporting the Guard and Reserve and making sure that they have the proper attention, equipment, training and whatever, and I want to commend him for that.

I also want to point out that the gentleman from Mississippi has been in this Congress and on this committee a lot longer than I have, but you gentleman were witness to somewhat of a disagreement that the gentleman from Mississippi and I have relative to last August when the law was 90 days and an opportunity to extend for an additional 90 days.

I am very respectful of the Congress, but I don't share the confidence that the gentleman from Mississippi had as to what the reaction of Congress would have been at any given time, and as a matter of fact, as late as January there was not a lead pipe cinch as to whether or not the Congress was going to vote to let the President use force whatsoever, so I think as we proceed down the line and talk about this integration of force, I think that resolving once and for all and extending the length of time for which the executive can call up a Guard or Reserve Unit would certainly help the whole process, but I just want to point out I didn't share that confidence, Sonny.

Mr. MONTGOMERY. That is a disagreement, if the gentleman would yield. I have no problems in taking a look at the law. That is why we want to test it out to work these matters out of call-ups. I think you make a good point.

Mr. MARTIN. While we are here in the process and talking about roundouts specifically in the Guard and Reserve, in these post mortems that we do inevitably, we look at where things could be improved, i.e., was something wrong, and that is right that we should do so. But I think the emphasis ought to be on what is right, and an awful lot is right with this combination of Active Force, Guard and Reserve, and I think all the units are to be commended for doing a tremendous job in a short period of time.

But, it always seems to be our intent, we don't mean to do it critically, but in trying to figure out how we can do it better, let's not forget how much good there was and how much good has been done. First of all, how many of the combat maneuvering units actu-

ally went to the National Training Center up to this point and can I ask first within 30 days of call-up or 60 days of call-up?

General BURBA.

General BURBA. Since the crisis occurred, sir? All three brigades are scheduled to go through the National Training Center. One has completed; Colonel Davis' 48th Infantry from Georgia and South Carolina has completed. The 155th Brigade of the Mississippi Guard is there now getting ready to go through its training. The program was designed for all three brigades to top off their training with a National Training Center rotation.

Mr. MARTIN. The point I am trying to make as far as those combat units that are roundout, it would be wished that they would all have the opportunity within the 30 days or whatever period of time that you think they ought to be able to deploy to be able to get through the training center, and of course you do have a bottle neck on the best of occasions at the National Training Center, so I think we have to appreciate our own reasonable expectations as to the time; is that not true?

General BURBA. Yes, sir, that is a good point. Now these brigades don't necessarily have to go to the National Training Center to be validated as combat ready. At Fort Hood, for instance, the Louisiana and Mississippi brigades have been training for a considerable period of time with the Multiple Integrated Laser Engagement System (MILES), and we get a good feel for what their readiness is, and I would be prepared to validate them, if necessary, based on that training.

If we have the option, of course, we will always send them to the National Training Center.

Mr. MARTIN. That is the point I wanted to make. There is really no clear substitute. In a perfect world you would like to have all your units routinely going through the National Training Center.

General BURBA. Yes, sir, that is right.

Mr. MARTIN. One final thing. I would like to have you, General Conaway, and you, General Burba, clear something up for me. We are using the term "combat" forces just routinely and mixing the combat forces as between a Guard squadron of F-16's or A-10's and a tank battalion or whatever, and it seems to me that—and I would like to ask you to speak to this, that there is a differentiation as to the immediate training prior to deployment that is required to get, say, a Guard aviation squadron and a tank maneuvering battalion up to speed. Is that true?

General BURBA. Yes, sir, that is true.

Mr. MARTIN. I would like to have you amplify on that because when I hear combat forces we don't differentiate between maneuvering units, infantry, tank, armor, artillery with combat support, combat service support, medical, transportation, logistics and those kind of things, and I would hope that all the Members and everybody who is watching this hearing would understand that they aren't interchangeable and they each require different treatment to be ready to deploy; is that not the case?

General BURBA. That is absolutely true. Some of our most complex individual skills, such as medical as a good example, aviation is a good example, where there is civilian equivalency and which are easy to train on the weekend, are some of our most ready units.

We have outstanding Guard aviation units, and in the Desert Storm deployment, some of our earlier deploying combat support and service support deployments were Guard and Reserve units. Aviation units went over, our medical evacuation detachments and companies, for instance, went over very early. Those type skills, even though they are complex individually, are not complex in a collective sense, and you can train them easily on the weekend and through civilian equivalency.

The tough ones are what we call our combat arms skills, calvary, infantry and armor. Some folks throw in combat engineers, but those are the three principal ones. Combat arms units must synchronize everything on the battlefield. You are synchronizing artillery and Air Defense Artillery (ADA) and gun ships. They coordinate air support from the Air Force and the Army and the naval Air, your engineers. You are synchronizing everything at company level and above.

It is that synchronization that is so difficult. It is an art. It is not a science, and it takes time to master, so that is the basic problem that we have with our combat arms units.

Mr. MARTIN. Just for emphasis, it would be unconscionable of me not to ask General Conaway to emphasize that point specifically relative to the aviation assets that General Burba spoke to.

General CONAWAY. Yes, sir, the aviation units, as you know, get additional flying training periods over and above their 39 days. Army Guard Aviation and Air Guard Aviation, the New York Air National Guard, the 174th that you would see on TV, the Boys from Syracuse, they have a different situation than these large maneuver brigades do.

They have to go in 24 hours. They flew combat, 48, 72 hours after they arrived on the first night along with the South Carolina Air National Guard and the Nevada Air National Guard and many of the other States that were over there with their air lift—Maryland, Wisconsin with tankers, and what have you. The pilots and air crews who fly these are on the range twice a week.

They can take off from wherever they are located and generally in 15 minutes be on the range. These large units with 5,000 people versus a few hundred and about 40 air crews who have to stay current, if they could get to a range twice a week, my gosh, they would be unbelievable, I guess, wouldn't they, General Burba?

So there is a difference of how you get ready. Plus they have to wait for airlift and sealift. The air units get themselves over there and they are ready to go, plus they support the Army.

Mr. MARTIN. I thank you, but I think that needs to be emphasized when we talk about Guard and Reserve and not generalized as to the kinds of unit, the time it takes to get them up to full speed and integrate with the Active Component if they happen to be a roundout. One other thing, General Burba—and I would commend for a rereading General Burba's statement to all the members of the committee, because I think it makes the proper emphasis and explains that there is a difference between a maneuver unit and combat support, combat service support and the like.

One other question, General Burba, and I ask this not only because of the position you now hold, but I know that you were CG in the 7th Light Infantry Division. I think that is where I met you out

of Fort Ord years back, and relative to those kinds of units, I want to quote your statement here.

It says, "In the scenarios for which the roundout concept is applicable, i.e. with early reenforcing, as opposed to rapid deployment forces, there would be time for training and deployment with the full division."

I know there is a distinction between rapid deployment and light infantry, but of course one of the assets of light infantry is the ability to hit a given place with fewer sorties. Do I draw from that that roundout brigades, National Guard, Reserve units you feel might not be the best way to go as far as light infantry divisions are concerned?

General BURBA. Yes, sir, in most cases. Because your light forces can be deployed very quickly, and particularly with the nature of the conflicts that we are likely to participate in, certainly in the next several decades, you are going to have to send some forces in immediately, on day one of the crisis in all likelihood.

The only forces you can get there that quickly, unless you happen to have forces afloat right off the crisis area, will be your light forces, so you can close them by aircraft at 600 knots or so. You can get them there quickly. However, they will be at high risk if they are in a high-technology tank environment, so you need to reinforce them very quickly with heavy forces.

That is why, also on day one, you need to immediately get heavy forces enroute to the crisis area. Those two forces, your rapid deployment light forces and your rapid deployment heavy forces that need to leave immediately need to be Active Component forces.

Those forces, though, in the crisis area should be able to stabilize the situation, and they buy you time. You don't win, but you don't lose, and that gives you the time to put your early reinforcing divisions together that will ultimately deploy and win the fight for you.

In those early reinforcing units, we feel strongly that the roundout concept has great application, and so 30 days is a useful goal, but it doesn't necessarily—if you can't meet it, it doesn't rule out the roundout concept. I think that is a very important point because if you don't meet the 30-day goal, that doesn't necessarily mean you are going to lose the fight.

If it takes 60 days or 90 days, you have sufficient active forces there that are going to hold, or delay until you can get your early reinforcing divisions there. So I wouldn't rule out roundout just because you can't get them there in 30 days.

Now, the sooner you can get them there, the sooner you are going to be able to terminate the conflict and the fewer casualties you are going to have, so it is not a trivial point.

Mr. MARTIN. But relative to light infantry divisions, you think it rates at least rethinking, roundout?

General BURBA. Yes, sir. I would just say that for the most part that is true. I mean, you still need light infantry, I think, in some Reserve units because they fight on one end of the conflict spectrum, and if we, for instance, ended up again in a Vietnam situation or in some sort of a close terrain-type situation, tank units aren't all that useful. Yet, you may have to have some Reserve forces ultimately involved in that conflict, so you can't rule Re-

serve light infantry units out completely, but in most of the contingencies that we would be faced with, however, I think, yes, that Active Component Light Infantry divisions should not be rounded out.

Mr. MARTIN. No more questions, but I just want to point out something that I think Ike referred to. As far as General Burba is concerned, and we are all fascinated with how you get and tailor nearly half a million troops to that area of the world, and this is the gentleman before us that had the awesome responsibility of doing that, and I think he deserves the accolades of all the American people.

It is good seeing you again. I hope you call me next week.

General BURBA. Thank you, sir.

The CHAIRMAN. Let me follow up on one question before I call on John Spratt, and that is essentially the plan that General Powell and I guess General Butler before his new job put together of where the force structure ought to go in the future, and basically what it anticipates is, of course, an Atlantic force and the Pacific force and the Continental force.

The continental force has five divisions which would be a fairly quick reaction division. I guess, it has no roundout brigades or units with them. Then another three, which I take it have a roundout. The rest of the follow up would be Reserves and things.

General Conaway, does that strike you as a reasonable proposition?

General CONAWAY. Well, you are talking about how many roundouts for the continental?

The CHAIRMAN. Zip for the five. First, the five divisions which is the fully structured rapidly deployable force, all right? So you have got forward deployed forces. Then you have got fully structured rapidly deployable forces, five divisions; no roundouts. In fact, almost totally without any Reserve support at all, I guess, pretty much self-contained units that are available for deployment, followed by early reinforcement, and I don't know what the definitions are, but essentially early enforcements has three divisions with three roundouts, one each, which I guess is more or less what we are talking about here in this case.

But essentially what it is, we have not abandoned the total force concept, but we sure pushed it to the units that are coming later. I mean, this is a big change from having a roundout unit in the 24th or the 1st Cav.

General CONAWAY. Sir, it is still under discussion; we are talking with General Burba and General Vuono in the Army about having some roundout units within that force where we will join them with a division similar to what you mentioned, so there still is a plan. I think General Vuono mentioned at a hearing that he still wanted to keep the roundout concept, wanted to keep it in business.

Most of them will be in the 30 to 60 and 60 to 90-day forces, but I think we are still in discussion about having a couple of brigades that will go at about the 30-day mark with the continental force.

The CHAIRMAN. John Spratt.

Mr. SPRATT. Thank you, Mr. chairman, thank all of you for your testimony.

Most of my questions have been answered, but I spoke to the AG's association just a few weeks ago, and one of the questions they raised was the validity of the combat certification system.

The point they were making, of course, is that if those units that were called for combat weren't ready for combat, they should have been ranked something other than C-1 to start with.

I sensed among them a dissatisfaction and a lack of confidence in the combat readiness system and sort of an underlying request that if the ability isn't satisfactory with these units, they should tell them, tell them in advance and let them address the deficiencies that the Army detects so that when they are called up they can have some lead time to have been working on them and correcting these problems.

Do you think that is a valid criticism of your certification system?

General BURBA. Sir, I think there are definitely improvements to that system that we need to make, and we have the full intention of doing that. The problem we have had in the past is that we wanted to keep—in that it is a total Army—no haves and have-nots. Everyone has equality; therefore, we measured the Reserve forces, both Army Reserve and the National Guard, on the same criteria that we graded the Active forces.

The Reserves train 39 days a year. The Active force are training more than 200 days a year. Equal comparison is unrealistic. So we need to formulate a new system, and these are my personal views. We need to formulate a new system whereby we evaluate the reserve units against two criteria—against what they can accomplish during those 39 training days a year and against their capability to fulfil general war reinforcing and contingency missions for which they are task organized.

I think we can do that, and I think we will have a better system, so I would say, yes, the criticism is due, and I think we need to improve the certification system.

Mr. SPRATT. Does your—

The CHAIRMAN. Would the gentleman yield?

Why would you do it any other way than the way that you—I understand that you are training 200 days a year plus for an Active unit and only 39 days, but if you are calling upon Guard units to perform, as you are in the case of roundout units, the same as Active duty units, why shouldn't you judge them on the same basis?

General BURBA. Because they wouldn't be deployed on day one. You will have 30 days, 60 days, whatever it turns out to be. What happens when you evaluate them against the different component standard, in my judgment, is that you tend to have them training at too high a level, so because of only 39 days of training, they try to train at brigade, battalion and lower levels.

Therefore, they reach mediocre standards, and therefore when you go in to their post-mobilization training, they are at a lower level of training than they really should be.

If you evaluated them based on more realistic standards of what they could accomplish in 39 days, then they would go into post-mobilization training at a much higher level.

Therefore, we can bring them to total combat readiness much quicker.

The CHAIRMAN. So what kind of training would you emphasize in the 39 days, recognizing that you have only got 39 days with these guys as opposed to 200 or whatever it is with the active duty? What kind of training would you emphasize in the 39 days that you get?

General BURBA. Individual training to include leader training, soldier and leader training, and small unit collective training, and maintenance. Now, that would not exclude completely training at the higher levels, at battalion or brigade level, but you would do that in what we call a multi-echelon fashion using the simulations.

Instead of running full-up battalion field training exercises to train at battalion or brigade level, you would do it with simulations. Meanwhile, you are concentrating on your lower unit collective skills and individual skills.

General CONAWAY. Can General D'Araujo comment on that one? The CHAIRMAN. Sure can.

General D'ARAUJO. Sir, I would just like to comment on the idea of multi-echelon training and the levels of training that General Burba was alluding to. I think one of the things that has been validated in the concept that we have just seen used to train these three brigades is the crawl, walk, run method that took them from basically an individual platoon level up through battalion task force and brigade. There had to have been a level of sustainment training that allowed them to do all of those things in a relatively short period of time. In order to accomplish this, they had to train very intensively prior to mobilization. But, I would say that we have been stressing with all of our combat units that there has to be, as General Burba alluded to, the multi-echelon approach.

Our battalion and brigade staffs have got to be provided the same kinds of opportunities for the staff training that their Active Component counterparts have if we are going to meet the same standard of collective training. As an example, it was recognized early on in the training process for the three brigades that their commanders and staff needed the Tactical Commanders Training Course at Fort Leavenworth, and all three of them rotated through that.

What we would like to see is a mechanism that would allow, in the pre-mobilization phase, those kinds of training opportunities so that we wouldn't have to use post-mobilization training time to do that. I would point out that we need to examine our training strategy. I think everyone agrees that, in the pre-mobilization phase, we need training programs that will allow higher levels of tank gunnery sustainment.

For example, we may need to require extensive use of simulations, much as we do with our aviation force, that will allow us to train to tank gunnery standards, to sustain a higher level of skill and avoid the 2-year cyclical training notion that we have been using up to now.

But I think Guard units can train at a higher level, and what we need to do is look at our annual training periods where we need to focus on that. I agree whole-heartedly with General Burba that during the IDT phase we pretty much are limited to the small unit level training.

However, at the annual training period, in my opinion, we may need to look at a longer annual training period, perhaps 21, perhaps 30 days to get us through the battalion task force and brigade level, to the standard to which we are being asked to perform right now with these three brigades. I agree with what I heard the three brigade commanders saying, that they could meet deployment times of 30 days.

We can shorten that time, but it does require some modification and alteration to the strategy we are using in the pre-mobilization phase and, to some degree, the resourcing. For example, when we say we need to train the tank crews on simulators, we have got to make sure those things are there. We need to make sure that the brigade commanders and staffs and battalion commanders and staffs are resourced to participate and the opportunities are provided to do that.

Mr. SPRATT. Let me ask you then a particular question. General Burba points to a deficiency at unit level maintenance, which was somewhat surprising to me. That still raises a question about the discrepancies from service to service.

Now, my understanding is that in the Air Guard, particularly looking at the unit from South Carolina with which I am familiar, the unit level maintenance is superb. In fact, it got accolades from Aviation Week just last week in an article about one of the squadrons from South Carolina.

The maintenance units there are typically much older, 35 to 40 years of age on average, whereas the regular units tend to be much younger, less experienced, and these maintenance types have a lot of seasoning, and they keep their planes in superb condition. Why can't the Guard develop that same kind of ethos and expertise in its maintenance ranks, tank maintenance ranks, for example?

Colonel Davis.

Colonel DAVIS. One thing is geography. We keep our Bradleys and M-1's at Fort Stewart. We have 39 armories around the State from the extreme part of North Virginia to way across in the South. We have typically one or two Bradleys or M-1's at an armory. We don't have the equipment to train on.

Mr. SPRATT. So you don't link up with your full complement of equipment except for annual training?

Colonel DAVIS. Exactly, sir, we have either got to tailor more annual training or different periods of annual training to get to the equipment to maintain it effectively. We don't have really as many full-time maintenance personnel as the Air Guard units you referred to.

Incidentally, your South Carolina tank battalion did real well.

Mr. SPRATT. I have a statement here from our Adjutant General Eston Marchant, which is very outspoken and forthright. Mr. Chairman, I would like to ask unanimous consent to have it made part of the record. It is entitled, "Adjutant General Refutes Criticism of Guard Combat Readiness."

The CHAIRMAN. Without objection.

[The following information was received for the record:]

NEWS RELEASE
The State of South Carolina
Military Department

**FOR IMMEDIATE
RELEASE**



Contact: Captain Les Carroll
Public Affairs Director
Phone: 748-4336

T. ESTON MARCHANT
MAJOR GENERAL
THE ADJUTANT GENERAL

OFFICE OF THE ADJUTANT GENERAL
1 NATIONAL GUARD ROAD
COLUMBIA, S.C. 29201-098

March 6, 1991

Release No.910303

EDITORIAL

ADJUTANT GENERAL REFUTES CRITICISM OF GUARD COMBAT READINESS

by Major General T. Eston Marchant

The Adjutant General of SC

Questions have recently surfaced in the media about the readiness of National Guard Combat Arms (Infantry, Armor, and Field Artillery) units mobilized during the Persian Gulf War. I would like to try to set the record straight on this important matter, with particular emphasis on the Combat Arms unit from the South Carolina National Guard, the 1st Battalion 263d Armor, headquartered in Mullins, South Carolina.

Erroneous and often times anonymous statements have been made that these National Guard Combat Arms units which were mobilized (including the South Carolina Army National Guard Armor Battalion) were not combat ready and needed additional training. I can say

-more-

MARCHANT EDITORIAL 2-2-2

without fear of factual contradiction in an analysis of training performance prepared by the active Army just weeks before DESERT SHIELD commenced, our armor battalion was rated as qualified for deployment. This standard was and has been our guidance and goal for years and was established by the Army as the standard for deployment. Additionally, if our unit had been mobilized and deployed as the system required, it would have received, along with its active Army counterpart, at least five more months of additional training that the active Army received in the desert of Saudi Arabia--before the ground war commenced. It is interesting, I think, to note that twice during that training in the desert, senior Army officials spoke out that the active Army Forces deployed in the theater needed additional training. The commander of the 3rd Armored Division stated as late as mid-February that his Division had not trained above the battalion level in years, and he needed more time to train before the beginning of hostilities. It should be said that the 3rd Armored Division is one of the Army's premier forward deployed divisions.

The training exercises just completed by our South Carolina Armor Battalion at Fort Irwin, California, had no relation to its training readiness at the time of mobilization, but was instead a by-the-numbers program designed by the active Army for a generic

-more-

MARCHANT EDITORIAL 4-4-4

force levels to reflect the current threat-warning analysis. Some envisioned an Army only half the size of the current 730,000 strength, with increased reliance on the Guard and Reserve. However, the Pentagon proposed a cut in the active Army of 190,000 spaces and cuts of 200,000 spaces in the Guard and Reserve--a one to one cut known as OPERATION QUICKSILVER. We, in the Guard, and the Congress of the United States, did not support this approach to force structure reduction, and therein lies, I believe, the motivation for the instant "unreadiness" label pinned on Guard units these last several months. If the Army can convince the Congress that these allegations of Guard and Reserve unreadiness are true, then necessarily a larger standing Army will be required to meet the nation's security requirements.

It strikes me as more than just coincidental that with this sudden unreliability in the Guard and Reserve force structure, we are right back to the Pentagon's force structure proposal of August of last year--one to one reductions. As I have said, The Congress did not buy the proposal of the Army and legislated that the Army National Guard be in effect frozen at its current strength (457,000), and that the downsizing commence with the active Army while further analysis could be made of both the cost and national security impact of downsizing.

-more-

MARCHANT EDITORIAL 5-5-5

Unfortunately, distrust of the Militia (the National Guard) by the active Army is not a new phenomenon. It has been going on since the American Revolutionary War, and has continued on to the Spanish American War, the Mexican Border Conflict, WWI, and WWII. General George Washington was rebuffed numerous times by the Regulars as just another Militia (Guard) officer before being called upon to lead the Continental Army. The 1/263d Armor Battalion, South Carolina Army National Guard, is and was ready to go to war as measured by the existing Army standards. The innuendos and anonymous comments to the contrary are incorrect and unfair and demeaning to all those Army National Guard Combat Arms units that have trained to active Army standards for the last ten years, to include the 1/263d Armor Battalion, South Carolina Army National Guard.

-30-

Mr. SPRATT. Is an opportunity lying just ahead of you to take care of your speciality deficiencies? With the Active Army beginning to downsize, there should be quite a few NCO's or well-trained specialists who are coming out of active duty who might be recruited by the Guard. Is this an opportunity, number one, that exists and, number two, that we might help facilitate you to take advantage of by making it more attractive to convert from Active to Reserve or Guard status?

General BURBA. Sir, I think clearly that it is. We don't know what that ramp will be exactly, but it is very clear that we are beginning to ramp down substantially in the Active Component and we will lose some absolutely superb officers and non-commissioned officers, and I would hope that we will be able to capture them in the Guard and Reserve.

Mr. SPRATT. You were speaking of certain specialities which it required years to get to a master's level. A lot of people will be getting out and it would seem to be an excellent opportunity.

Is there anything legally that needs to be done to make the conversion more attractive, enactment of law in Congress?

[The following information was received for the record:]

TRANSITION OF AC SOLDIERS TO RESERVES

As the Army downsizes the AC, it is apparent that not all soldiers who want to remain on active duty will be able to do so. In my opinion, an attractive alternative to many could be the conversion from active duty to Active Guard/Reserve (AGR) duty. This would require an increase in the current AGR authorizations for both the ARNG and USAR.

As presently constituted, the full-time support (FTS) in the USAR is approximately 8 percent and the ARNG is about 12 percent. This is compared to the Air Force Reserve at approximately 21 percent and the Air National Guard which is approximately 26 percent.

I believe that with the authorization to increase the AGR strength in the Army, the readiness of the Total Army can be improved. For example, in any Reserve unit there are always some soldiers who are not deployable. This includes soldiers who have not yet undergone their initial active duty training, are still in high school or have a temporary condition making them nondeployable. The limits on funded levels of strength combined with the nondeployable "overhead" make it impossible to have the entire RC force at the readiness levels we need. While we can "quick fix" specific units by cross-leveling between units like we did during Operation DESERT SHIELD/DESERT STORM, this does not solve the underlying problem force-wide. Integration of AC soldiers, converted to AGRs, and assigned to units for assumption of wartime missions would significantly resolve this issue and increase RC combat readiness.

Other examples of where full-time support to the RC would improve readiness are:

(a). The expansion of Readiness Groups (RG). These are organizations, currently staffed by AC soldiers, that are dedicated to training and assisting the RC. By expanding the size and mission scope of the RG, a decided increase in their ability to improve unit and individual readiness will be realized.

(b). *Regional Training Centers*. These are organizations/facilities which would be located at existing installations. They are in the developmental stage and would have the mission of training RC units. They would be designed to provide both the training, and necessary equipment and area/facility as opposed to only providing a place for units to train.

Another area which would facilitate the transition from Active to Reserve Component Service would be to retrain AC soldiers in skills needed in the Reserve Components. The conversion from active to reserve duty will be more attractive for soldiers if they are MOS qualified for the positions in the Reserve Component. In the Army Reserve, for example, most of the positions that are vacant are in combat support and combat service support units, yet many of the soldiers who will be leaving the active Army are in the combat arms. These are top notch soldiers who are

highly trained, but trained in skills that may not be needed in RC units located in the geographic area they are returning to. Assigning soldiers to positions for which they are not qualified hurts the readiness of the unit and limits the soldiers' ability to be promoted.

In my opinion, we need to provide more opportunities to retrain these soldiers. This will require some changes within the Army and may also require that funds be provided by Congress to accommodate this retraining.

Additionally, we can continue to expand monetary and other incentives such as prior service enlistment or transition bonuses. We need to carefully match these bonuses to meet readiness requirements. Other initiatives such as tax relief or Individual Retirement Account eligibility for reserve earnings would also enhance the desirability of Reserve Component service. Continued support in Congress of these initiatives will assist in attracting departing active soldiers to continued service in the Reserve Components.

Mr. SPRATT. General Conaway.

General CONAWAY. I agree. Also, obviously, depending on what the ramp is of active duty personnel that when they adjust the final forces, is to have billets so that we can capture these people. Patriotism is high, serving is high. We think a lot of them will want to stay. We think our retention is going to be better than we first thought.

The IRR, that we don't run, the Army Reserve, Air Force Reserve, Navy Reserve, the Individual Ready Reserve, we have gotten some tremendous soldiers out of that. They are in these brigades here. We may be able to recruit and retain some of these Individual Ready Reserve personnel who were not in units that perhaps have the motivation to stay in reorganized units.

Mr. SPRATT. The Army is planning on having two cadre divisions sometime after you have down-sized and the AGRs raise a question as to whether or not it is feasible to think about taking skeletal divisions like that and rounding them out when we haven't yet perfected the possibilities and process of simply running nearly fully fledged divisions.

General BURBA. Again, this all relates to time. When are they required. If you need the units very quickly—immediately—they have to be from the Active Components. If you need them within a reasonable period of time, approximately 90 days, the roundout concept we think will work well. If the forces are required after that, then you probably need full-up Reserve divisions.

Then if they are needed after that, and I don't know what time frame we would be talking about but probably a year, then the cadre concept would be applicable. Then 18 months after that, you can probably just mobilize and put the mobilized forces into training divisions and train them up that way.

So it is an issue of when do you need them. The cadre divisions would be very late deploying units. So they all have an important application in the full spectrum of time requirements.

Mr. SPRATT. Thank you very much.

Mr. NATCHER. Bev.

Mrs. BYRON. Thank you, Mr. Chairman.

First of all, as one that joined with the Chairman and General Montgomery in urging the administration to call up the combat units because I felt very strongly that we have in our overall concept put a role and an emphasis on the Guard and Reserve, and it is time and it was time to check on that to see whether the ideas

that we had on paper were doable—and as we have seen, some of it was doable and some of it caused problems.

I think the 256th, some of the comments on that brigade were that we were transitioning into new equipment. Would you have been more ready a year ago before you had looked at transitioning into new equipment and gone with the old equipment, or would you have stated that probably a year from now you will have been comfortable with the new equipment which you had been integrated into?

Mr. Skelton talked about the Marine units that had been deployed, Mr. Martin talked about aviation units that had been deployed and deployed without the difficulty. I have a Marine unit, I have a Navy unit, some Guard units, all of them have been deployed with enormous support throughout the communities and now they are looking forward to those units coming back and they have been in the desert.

The thing that concerns me is the three brigades that we have represented here before us today, that are now ready or almost ready, that will be finishing their training in the next several weeks, and then will be deactivated. What is that going to do to the morale of those units that have taken some criticism for taking a little bit longer to get ready? What is it going to do to those individuals who have really, at great physical and mental effort, pulled together and shaped up units to be told now "thank you very much, you can now go home"?

Is there a way that, since those brigades are going to be in a higher state of readiness, that we can keep some of those lessons learned, keep some of that leadership training that the officers went through early on in their call-up? Before they were able to get back with their units in the field, they were separated from those units because they were trained in other areas. What have we learned and what can we build on from what we have learned?

I noted time and time again the question on the physical capability, the critical dental problems, 50 percent failed initial physical tests. That possibly is a problem with American society, but I think it is an issue that the Guard, if they are going to be credible, needs to put more of an emphasis on.

We have reserve medical units. Can we look at correlating Guard health care with those medical units as a training experience?

The dental issue seems to be one that was high profile. If it is one that is a serious problem with the Guard and the Reserve, should we not look at using some of our Reserve dental officers to meet some of those requirements during the off-year period of time? The answer is always going to be more money, more training, but I think we see the dental and the medical community in the Reserves doing training, and maybe we ought to try to correlate something of that nature with the Guard and the Reserve.

General CONAWAY. That is a very good suggestion. I think there is some possibility there.

We in this area and in the area where I am from, Louisville, think that everyone has fluoride today. All the youngsters grow up and don't have the cavities that I had, born in the Depression. We still have 50 percent of America growing up in rural areas.

These brigade commanders represent basically rural America where they have great people, great soldiers, great patriots. They are young soldiers, they are trying to go to school, they are working at minimum wage and using Guard pay to make ends meet. The last thing they can afford is dental care and they don't have fluoride. With well water, there is no fluoride. I thought everybody had fluoride today, but we don't.

Mrs. BYRON. General Montgomery has cited numerous times the dental problems with the Guard and Reserve, and it seems to me we could look at a better correlation within the States with their Reserve medical personnel. We have seen a lot of Reserve medical skills that have been called, have been deployed, and the concern that we have is when they come back, whether we are going to lose those skills in our Reserve component.

General Conaway, the brigades are mobilized without many of their leaders because they were shipped off to leader training schools. There is some evidence that the lack of leadership also affected the NCOs early on in that training cycle.

How can we close that training gap that seems to be there?

General CONAWAY. That didn't happen with all of them, but it did happen with a few of them, and that was discussed a little bit. If we can get some slots in the schools as we work with General Burba and the Army staff, and get the proper resources so we can get them into these schools through the year and particularly pre-mobilization. That is a good issue that has to be worked harder.

Mrs. BYRON. The issue of AGRs is one that we debate long and hard yearly up here. I understand that many of the AGRs are really working in a headquarters function. Would they not be better served in a different area?

General CONAWAY. Yes, and the majority of those have been shifted as each year passes more and more to the combat units. We are making that transition. Early on, the AGR program was both in headquarters and in the field. Now we are having more technicians in headquarters and AGRs shifting out to the field. But we do need the AGRs.

Mrs. BYRON. I am one that tries very hard to get lessons learned. Could you provide a little background on your unit with the AWOL investigation at Fort Hood?

Investigations were conducted, one by the Army Criminal Investigation Division, that focused on the circumstances of the 67 soldiers. Were you satisfied with that investigation, the results of the investigation, the decision that 17 soldiers had valid passes and would not be charged and that 31 received Article 15? Is that investigation handled to your satisfaction, and the status of the other 19 soldiers involved currently is what?

These are tough issues and tough questions, but I think we will all be better off for having these answers in an open session on the record and clear the air because we have had a very, very outstanding record from many of the young people that have left their home communities quickly; their lives have been disrupted, and have served and put an enormous amount of effort into getting ready when called.

General WHIPPLE. I appreciate the opportunity to respond to that. This was an unfortunate incident, unfortunate in the public-

ty that it received, I believe, when you consider the fact that well over 6,000 National Guardsmen from the State of Louisiana were mobilized, 2,000-plus deployed to the theater of operations, and over 4,000 with the 256th Brigade on a day-to-day basis did their jobs and never did anything other than train very hard to do what they were supposed to do.

There was less than 1 percent of the soldiers mobilized that were involved in this incident. The incident was one of some 27 soldiers who in fact were on pass and about 40 who were not. Those who were on pass violated the limits of the pass with regard to miles and then time, and the others followed along in a sort of a crowd mentality. "I have a pass, I think I am going to go to Shreveport, would you like to come too? I don't have a pass, but I think I will go as well." There was no organized attempt to group these folks together. There was no mutiny, if you will.

It just so happens that the bus company decided to put an extra bus on in Dallas because they had 45 or 50 more people to ride than scheduled, so they put on a bus and they got off the bus in Shreveport together. It was a crowd mentality that formed up as some of these folks left.

Mrs. BYRON. Did it have an effect on those that did not leave?

General WHIPPLE. Yes, it had an effect of great embarrassment from the brigade commander down through the people within those two company size units.

We did complete an extensive investigation. The normal legal procedures were followed that would be followed in any Active Component unit, and all of this was done to my satisfaction and to the satisfaction of those members of that battalion that did not participate.

The CHAIRMAN. Excuse me, what was the disposition then of the cases?

General WHIPPLE. We had 44 that were given Article 15s, nonjudicial punishment. The punishment ranged from fines of approximately \$150 in the lowest case to as much as \$1100 in the more serious ones. Reductions in rank of usually one rank for each of the individuals involved. But each case was judged individually on its own merit. There was no attempt to look at the thing as a collective effort. Each case was judged by a senior officer on its individual merit or lack thereof.

The CHAIRMAN. That is 44 out of 67?

General WHIPPLE. Yes, sir.

The CHAIRMAN. The rest?

General WHIPPLE. Some are still pending. But some were dismissed because the individual who was doing the nonjudicial punishment decided they should be. I was not the one that did that.

General CONAWAY. Your question, are these units ready and nowhere to go but deactivation; that is a tough one. They are as much heroes and great servers, I think, and we have to say that, as any of the other 220,000 Americans that were called. These three and all of their men made the same sacrifices leaving home and leaving their families and were subjected to unfortunate, adverse publicity in the press. When the snowball starts, it doesn't stop.

They trained very hard with the 4th and the 5th. General Whipple goes with the 5th Division and that division hasn't been tasked

to go anywhere so they wouldn't go until the 5th goes anyway. The other two divisions had already gone. They may have been needed. If they were, they would have gone.

Mrs. BYRON. We need to learn that they are now ready to go. How can we keep that higher state of readiness in those units so if called again, we will not have to go through the same scenario?

Mr. Spratt brought up a point, the fact that as we draw down our active duty forces, many of the young men and women that have been deployed and are back that will be coming out of the service voluntarily, some of them unfortunately involuntarily, will be coming back as an opportunity to pick up skills that they have from active duty.

We have, in last year's bill, put in a provision for 10 percent for those that are involuntarily separated so that will give you a little flexibility to pick up some of those, and I think that probably will be used by most of your units.

I am still not sure what type of reaction we are going to get when the brigades come back into their community, when those individuals, not just these three brigades, all of the Reserve and Guard that have been called to duty come back. Are we going to find many of those people that have been in the Guard and Reserve saying "I didn't know that I was going to get called, I am going to get out"? Are we going to find that as a mass exodus of the units?

Colonel DAVIS. We have experienced this in Georgia, all three maneuver battalions have gone to the NTC. It is a similar thing. We experienced attrition of personnel early, but it wasn't typically all of the people you wanted to keep in the unit anyway.

Last year at the brigade-level NTC rotation and the 60-day rotation, we expected to attrit some people. Other than that, it seems to help recruiting. If you train very tough, very difficult missions and people are able to arrange their lives around it, their civilian jobs, then it helps recruiting. I need all the help I can get. I have never been 100 percent strength. I am 92 percent strength, and most of my brigade lies outside of Atlanta and it is kind of hard to find the population to fill it up.

We will suffer attrition, but I believe historically tough missions help recruiting.

Mrs. BYRON. What kinds of reaction do you find from employers at home who have people that have been called up?

Colonel DAVIS. We don't have enough data. In isolated cases, there have been RIFs of personnel, several people who had their own businesses probably will have difficulty starting them back up.

We experienced this before with NTC rotations, and I don't know the answer to that.

General WHIPPLE. In Louisiana, we have a great deal of employer support for the Guard and Reserve. We too experienced some loss when we went to the NTC, but we have a lot of incentives in the State for people to join the National Guard and our strength has been 117 percent.

I don't feel that we will have much of a degradation of the strength after the self-selection process that mobilization has caused. We will not have a great deal of degradation in our strength other than the normal turnover that we experience.

Mrs. BYRON. Thank you, Mr. Chairman.

The CHAIRMAN. I have a long list of questions, other ones that were not asked by Members, and then we will finish up here.

One question or one subject that was not approached was the question of whether the leadership of the Guard units was considered adequate. Of the three people that are sitting there, I take it that two of you were not in charge of your brigades at the time of the call-up; is that correct?

Colonel COKER. I was in charge. The organization of the 155th Brigade was a little different from the other two brigades inasmuch as I was the brigade commander of the brigade combat team. There was a general officer whose go-to-war position was assistant division commander of the 1st Cavalry Division.

When the 1st Cavalry deployed, they appointed a replacement for him. Therefore, when we went to the 4th Division, they already had two assistant division commanders, so that caused some problems.

I was the brigade commander of the three maneuver battalions. General WHIPPLE. I was too.

The CHAIRMAN. Colonel Davis was not.

Tell me what the statistics are. Is it true that nine company commanders in the 256th were changed?

General WHIPPLE. No, sir, actually eight company commanders in the 256th, one was 2nd of the 152nd, the Alabama battalion. We had eight changed. Two were separate units, cavalry troop commanders. But, yes, sir, eight of them.

The CHAIRMAN. Basically I guess I have to ask you, isn't this a rather large turnover of folks that I guess for one reason or another didn't work out when the mobilization came? What do we think of all that?

General WHIPPLE. Again, I look back on the modernization process. Some of these young men had been in these command positions only a short period of time, had not gone through the modernization process with the Bradleys in particular, and consequently didn't really understand the complexity and the problems that had to be addressed with that type of equipment.

As we went through the training, we realized that this was probably above their experience level and their training level, so we replaced them.

The CHAIRMAN. Colonel Davis, what kind of experience did you have with the company commanders?

Colonel DAVIS. We changed some company commanders. It was a combination of some of them, a couple, for instance, had been in command up to 4 years and it was time to change them. We changed some who did not perform to standards. I don't know the exact numbers.

Colonel COKER. I changed one commander and one first sergeant.

The CHAIRMAN. What moral do we bring out of that story? Is there any question about the way in which the people were selected before or what kind of criteria that was used? What is the moral of the story here?

General WHIPPLE. Sir, I think that in the 256th Brigade as in the rest of the National Guard in Louisiana we have, the adjutant general established a policy that company commanders would be cap-

tains or promotable first lieutenants with the advance course qualification behind them. One of the people who we replaced didn't fit that category, and that is why we had to replace him.

I think that the established criteria fits pretty well in what would be expected in an Active Component company commander. It is just unfortunate that these young folks had not been in those positions long enough and the modernization caught up with them. The criteria for selection of commands is in place.

The CHAIRMAN. You wouldn't change it?

General WHIPPLE. No, sir.

The CHAIRMAN. General Conaway, what is your view on that?

General CONAWAY. I was called up in 1968 for 18 months and saw a lot of Army and National Guard units. All the things are different today; we have a lot more kids that want to serve and be there. I think one of the things is when you have them for 39 days a year, they may do very well in the civilian world, and one of the things we found, we put them in command positions, or I would see them in command positions, they would do well, but when you have them, in some cases for 24-hours a day and you are going 30, 60, 90 days, you notice that they may be deficient in a certain leadership skill. I think the moral is some of them can look very good in drill status for that 1 weekend a month or 3 days a month, but not quite be what you want when you have them a longer period of time.

The CHAIRMAN. General Burba, or anybody else to comment on this situation?

General BURBA. I think from our viewpoint, they have never had the opportunity to go through a sustained period of functional stress that is very similar to actual combat. So they didn't really have the environment in which to know which were their strong and best leaders.

Generally, their intuitions were correct. They kept most of their leaders, but this environment did allow them to evaluate very carefully and very accurately exactly who were going to be their best commanders. Even though they might have gotten rid of a commander, he may have been competent, but they had somebody who was more competent. They had the wisdom to replace their weaker leaders, because they knew that lives were going to be at stake and that combat is an unforgiving business. So I just don't think they have had the environment previously to very accurately select commanders. That is understandable in my judgment.

The CHAIRMAN. Who made the call in these occasions to change the commanders, the company commander was the responsibility of who?

General WHIPPLE. Sir, in the 256th, the battalion commander made a recommendation to me based on my judgment and observation of the company commander; I concurred, so they were entirely my calls.

The CHAIRMAN. So there was a battalion commander making a recommendation to you, is that right?

General WHIPPLE. Yes, sir.

The CHAIRMAN. How would it work for other positions within the brigade, you are the guy, is that right?

General WHIPPLE. Chain of command recommends up to the brigade commander.

The CHAIRMAN. How did it work in the case of Colonel Davis replacing his predecessor? Who made that call?

General BURBA. I can best answer that.

Because we did not have the organic division associated with the 48th Brigade, we tasked the 2nd Army commander, who has training oversight responsibility for that brigade to perform the division commander's role. He made the recommendation that that replacement occur, and I approved it.

The CHAIRMAN. I see.

OK.

Let me ask about—tell me about the artillery units.

General Conaway, we don't have anybody here representing the artillery units, but the two that were called up, the West Virginia and Kentucky was it, or Tennessee?

General CONAWAY. It was a brigade in Arkansas that included a battalion in Oklahoma, with the MLRS from Oklahoma, and then there was a brigade from Tennessee that included battalions in Kentucky and in West Virginia, and General Burba may have later information than we have.

The CHAIRMAN. Those were called up when?

Those were called up right a way at the beginning, is that what happened?

General BURBA. No, sir, they were not. We initially sent four and one-third divisions plus an Armored Cavalry Regiment out of Forces Command, my command here in the Continental United States. We had sufficient artillery support for those units, for the missions that they were assigned. Theirs was a deter and defend mission.

It was not an offensive mission. Once the decision was made to increase our capability and the options available to CINCCENT, the VII Corps was called up from Europe, and then we supplied another division out of Forces Command. We were given the instructions to give these units enhanced offensive capability.

At that juncture we had to substantially increase the number of combat support and combat service support elements, both for the original group that was over there and for the others just deploying. That is when the artillery brigades were called up.

The CHAIRMAN. They were called up, then, in November with the 2nd—

General BURBA. Yes, sir.

The CHAIRMAN. After the second group or the second deployment was announced, the second lot of deployments, is that right?

General BURBA. To the best of my knowledge, I would like to be absolutely precise.

I would like to submit that for the record, but to the best of my knowledge that is what occurred.

[The following information was received for the record:]

The 142d Field Artillery Brigade from Arkansas, with the 1/158th FA Bn (Multiple Launch Rocket System (MLRS)), was called to active duty on 21 Nov 90. The 196th Field Artillery Brigade, with units from Tennessee, Kentucky, and West Virginia, was called to active duty on 9 Dec 90.

The CHAIRMAN. Basically, they were called up and essentially deployed, is that what happened, or did they go through any post-mobilization training?

General BURBA. They did go through post-mobilization training. They were called up, and their equipment was prepared for deployment, and sent to Saudi Arabia as quickly as shipping was available. The soldiers waited until the equipment got over into the area of the crisis and then deployed by air.

During that period of time, they did do post-mobilization training.

The CHAIRMAN. Where did they do that?

General BURBA. They did it at their mobilization station, sir.

The CHAIRMAN. With what equipment did they do it?

General BURBA. We had other equipment for them to use, Active Component equipment, and other Guard equipment.

The CHAIRMAN. Basically what was the experience with that? That worked out that they did that?

How much post-mobilization training did they have then in the end?

General BURBA. Sir, I don't know precisely, because the shipping was the driving factor there in when they were deployed. I don't recall precisely, but I would say it was from 45 days to 2 months, and that is just a ball park figure.

I can get that information precisely for you, but I think that is generally correct.

[The following information was received for the record:]

The 142d Field Artillery Brigade trained with equipment and facilities provided by units of III Corps Artillery and the Artillery Center. They conducted crew drills, staff training exercises, common and survival skills sufficiently to validate their proficiency. Elements of the brigade averaged 54 days of post-mobilization training before departing the mobilization station.

The 196th Field Artillery Brigade conducted post-mobilization training primarily with their own equipment. No major weapon systems were borrowed for training. Fort Campbell provided auxiliary equipment and facilities to accommodate training once the brigade's equipment departed for the port. The battalions and brigade headquarters averaged 48 days of training before leaving Fort Campbell.

The CHAIRMAN. Weeks or months, whatever we are talking about, it was a couple months, like 6 weeks to a couple months, is that right.

General CONAWAY. Yes, it was over a month. One of them, the Tennessee Brigade, was training at Fort Campbell. I went down for some night firing with them, and they were very motivated, those three battalions were ready to go. As General Burba said, waiting.

The CHAIRMAN. So the kind of training that they had was pretty substantial while they were waiting for the stuff to be shipped, is that right?

They had a pretty good——

General BURBA. Yes, sir, they did, but they went——

The CHAIRMAN. Was it sort of the equivalent of sending the armor or the other divisions to Fort Irwin, is it that kind of equivalent?

General BURBA. No.

Again, those skills, even through they are complex individually, are not complex collectively. There are no major synchronization skills that they are required to perform.

We can keep the Guard and Reserve artillery units at very high readiness, and we could have deployed them much quicker than we did had we had the shipping.

The CHAIRMAN. So, basically, it is easier, what you are telling me, it is easier to do it with artillery than an armored unit or an infantry unit, is that correct?

General BURBA. It takes less time.

The CHAIRMAN. Less time, less post-mobilization training, just because it is more of a crew kind of operation and, therefore, you can do a better job of training that in the 39 days or whatever you have a year?

General BURBA. Field Artillery training accommodates to week-end training; that is very key. Combat Arms maneuver skills conversely, are very difficult to train on weekends because companies and battalions are geographically dispersed, and they have no local maneuver areas. So it is very difficult to train Combat Arms maneuver skills, even tank and Bradley gunnery skills during week-end training. But you can do that easily with simulations and other types of innovative training techniques for equipment-oriented skills and units—like Field Artillery.

General CONAWAY. Sir, we are just hearing the beginning of some distinguished service that these two brigades performed while providing fire support in Iraq and Kuwait with the 7th Corps.

We point up the long pole in the tent in getting any of our big units over there is the sealift or the airlift, or what can go which way, and we train until the equipment is there, and then we can go.

The CHAIRMAN. So at least in this set, the long pole in the tent is airlift and sealift.

In the case of maneuver units, the long pole in the tent might be the post-mobilization training time.

General BURBA. You can conjure up a scenario to prove anything on that, but generally speaking, I would say they are probably equal, given the amount and type of lift that is available.

The CHAIRMAN. But at least, let's put it this way, at least with the artillery, let's just have a hypothetical where we have enough airlift—let's say, enough sealift to get the stuff there within a couple weeks, there is no reason why they couldn't go into battle within a couple of weeks, given the kind of situation we had with the artillery.

General BURBA. It depends from one unit to another, but that is certainly within grasp because, in most cases, they can put steel on target from day one.

What you have to tune up is the coordination that occurs with the maneuver elements, fire planning, et cetera, and that will depend on leader capabilities, leader training, and the time that has been devoted to those particular skills. But it is well within their grasp.

General CONAWAY. These larger maneuver brigades, with their Abrams and Bradleys, you can't get them sealifted over. It is going to take longer even for them than it did for the artillery units, and so except for those very first quick four or five divisions that go, of which two of these brigades round those out, that they could go. It is going to be even 30 to 60 days to get their equipment.

Beyond that you are into longer periods of time until we get a greater capability for sealift. So personally I think sealift is the long pole in the tent, not post-mobilization training.

The CHAIRMAN. OK.

Well, the sealift is, of course, one of the topics we are looking at on this whole series of hearings, but gentlemen, let me say thank you for a very helpful morning here and very, very interesting, and it was very, very useful to the committee.

I appreciate your coming.

Thank you.

[Whereupon, at 12:40 p.m., the committee adjourned.]

[The following questions were submitted for the record:]

TACTICAL AIRLIFT TRANSFER

Mr Hutto: General Conaway, last year Congress directed the transfer of Tactical airlift to the Guard and Reserve because of a failure of the Air Force to modernize the Active Airlift fleet. Considering the outstanding manner in which Guard and Reserve units have performed in Operation Desert Storm, Air Force commitment to modernize the Active airlift fleet with new C-130Hs represented in the FY92 President's Budget, and your position as Chief of the National Guard Bureau, how do you view this transfer?

General Conaway: The transfer of any service mission totally into the Reserve Component is a difficult proposition. In this case, the total transfer of the Tactical Airlift mission into the Reserve Component is not recommended. There are several reasons for this. First, although the reduction of forces in Europe will reduce a portion of the airlift requirement in this theater, the requirement for intra-theater airlift will remain. If this mission is picked up by the Guard and Reserve, it may necessitate a larger full time force to support the rotation requirements.

Secondly, the more full time airlift requirements we are asked to support, the more the Reserve Component parallels the Active Force. In effect, this would only transfer the cost of maintaining the force from the Active to the Reserve Component and dilute the savings to the Department of Defense. The Guard has always prided itself on being able to provide high combat readiness at minimum cost. With the Guard and Reserve providing more and more of the airlift for peacetime operations, the cost advantages may shrink. Although the Guard could save money by operating at its normal lower peacetime operations tempo, there are a few full-time missions that don't make sense for a traditional Guard organization to take over completely. For example, permanent overseas assignments are a good example where the Guard can help out on a rotational basis, but might not "take over" the mission completely without becoming a mostly full-time force.

Thirdly, we have found through experience it is easier to fund, equip and sustain a weapon system or mission when the Guard and active forces remain partners in the mission responsibility.

Lastly, we, the Reserve Component, have proven through "volunteerism" that we can respond to contingency operations world-wide and sustain operations without mobilization for about 60 to 90 days, in most cases, without call-up. Indefinite sustainment is not practical as eventually activation would be required to sustain operations. Also, not all situations could be covered through volunteerism and call-up would be necessary. To avoid becoming vulnerable to the eroding effects of a systematic and repeated mobilization of the citizen soldier, it is best to retain some of the tactical airlift mission in the Active Component. The current force structure mix is appropriate. I do not recommend the total transfer of the Tactical Airlift Mission into the Reserve Component.

Mr Hutto: General Conaway, do you view this transfer as a positive step in terms of a "Total Force Policy?"

General Conaway: "Total Force Policy" in itself implies a continuing force structure mix of Active, Guard and Reserve forces. By transferring all of a particular mission into the Reserve Component, you by default no longer have a "Total Force". The most positive step towards "Total Force" would be for the Guard and Reserve forces to be included in the modernization of the Air Force. With the request for C-130H aircraft into Active Force, a new era begins in the aircraft procurement process. The Air Force should continue to support not only modernizing its force structure but also that of the Guard and Reserve.

Operations Desert Shield and subsequently Desert Storm have proven the wisdom of maintaining a modern airlift fleet. Deployment and resupply are essential in the combat arena. The Guard stands ready to continue the strong support provided during these operations.

EQUIPMENT ARRIVAL IN SAUDI ARABIA

Question. When did the equipment of the 24th Division and the 1st Cavalry Division complete arrival in Saudi Arabia?

General Burba. The last vessel transporting equipment for the 24th Infantry division arrived in Saudi Arabia on 23 September 1990. The final vessel transporting equipment for the 1st Cavalry Division arrived in Saudi Arabia on 26 October 1990.

197TH INFANTRY BRIGADE COMPARISON

Question. Compare the training of the 197th Infantry Brigade and other units in Saudia Arabia during the August-to-February timeframe with the training of the three guard brigades.

General Burba. I cannot speak to the specifics of the training program of units after deployment to the operational area. Key, however, is the fact that the 197th Infantry Brigade and all other Active Component forces were at a higher level of combat capability at the outset of the crisis. The 48th Infantry Brigade (GA) was ~~(DELETED)~~ upon mobilization but fell to ~~(DELETED)~~ and is now at ~~(DELETED)~~ upon its completion of training at the National Training Center. The 256th Infantry Brigade (LA) and the 155th Armor Brigade (MS) were both at ~~(DELETED)~~ with the 256th Infantry Brigade also needing to undergo Bradley new equipment training. I believe that in-theater training programs emphasized threat specific areas to include nuclear, biological and chemical defense, weapons zeroing, breaching operations (minefields and obstacles), land navigation (especially night movements), situational tactical exercise assaults on constructed Iraqi strong points, field training exercises, command post exercises, and calls for fire.

READINESS OF GUARD UNITS

Question. It's my impression that Guard units that were "needed", were called and deployed. These have performed in an excellent manner. Guard units that were "not needed" were then required to be validated, required extensive training and suddenly were not considered to have accurate readiness ratings. Would you comment on this?

General Burba. All Reserve Component units called up in support of the operation went through a validation process, those that deployed to Southwest Asia (SWA), as well as those performing other missions. Validation differed depending on the type of unit. Some units were easier to validate because they were specialized units with very specific missions. Others were more difficult because of complex organization and widely varying capabilities. But all units were validated prior to deployment.

Only units that were needed were called up. Some were needed in SWA immediately because their expertise was not available in the Active Component. Other units were needed later to augment the capabilities of the Active Component or to support the mobilization process. Finally, some units were called to enhance the reinforcement capability of follow-on combat units. The National Guard Roundout Brigades fall into this category.

These combat brigades were called up to fill out the structure of the two CONUS-based divisions that were next in line for deployment should the situation in SWA require additional combat power. The length of their training programs was more a function of time available than inaccurate readiness reporting. To deploy Reserve Component combat units without the benefit of as much post-mobilization training as was consistent with operational objectives was an unacceptable risk. As training progressed, the complexities of synchronizing the battlefield operating systems at brigade level became more apparent to the commanders and staffs of the combat brigades. This, more than any other factor, accounts for the differences in reported readiness and demonstrated proficiency.

ACTIVE ARMY C-RATINGS

Question. How many Active Army C-4 rated combat and combat support units were deployed to Saudi Arabia?

General Burba. None.

ROUNDOUT BRIGADES

Question. General Vuono told the committee that roundout brigades would be used in future reinforcement roles and that reinforcement units would be expected to be ready within 30 days after mobilization. What will

have to be improved in order to meet that schedule, given that we have just spent several months training the roundout brigades? Does the Presidential 200,000 call-up authority need to be modified to accommodate roundout units to a C+30 deployment time?

General Burba. DESERT STORM call-up was unique in several ways. For example, one of the roundout brigades was just starting new equipment training on the M2 Bradley Fighting Vehicle. That training had to be completed before more advanced training could be conducted.

Our goal is 30 days. Our experience during this operation was that it took 90 days. However, we learned a great deal about how to train to provide higher readiness prior to mobilization, and how to peak readiness levels after mobilization.

Premobilization readiness is key to permit us to arrive at mobilization with highly proficient crews, sections, and platoons. This will require renewed emphasis on the training time available to roundout units and on the training assistance provided to them. This can be done several ways: increasing full-time manning levels, improving gunnery programs, increasing Reserve Component access to staff training programs, improving leader training, increasing levels of MOS qualification, taking full advantage of simulation technology, and reducing personnel turbulence are just a few of the actions that can be taken. In the future, we may look at lengthening Annual Training periods. These things all require resources and this will be our real challenge.

Based on Operation DESERT STORM experience, I believe it would be helpful if the Presidential 200K call-up legislation could be changed to permit call-up of members of the Individual Ready Reserve and the period of call-up changed to 180 days with extension authority of another 180 days. This would accommodate the mobilization and train-up of large units like the roundout brigades and also allow access to the Individual Ready Reserve to fill unit personnel shortages without cross-leveling from other units that may be required for later deployment.

DESERT TRAINING REQUIREMENT

Question. It's been stated that desert warfare requires special training and that is why the National Guard units were sent to the National Training Center (NTC) and Ft Hood. Had any of the European units had desert training?

General Burba. To my knowledge none of the deploying European units had undergone desert training as units. The NTC is designed to train forces to combat standards. The fact the facility is located in a desert environment is a premium, as opposed to a facility being selected and dedicated for desert warfare training. The National Guard units were sent to the NTC to train for combat. Desert training was obviously valuable under this scenario; it was not, however, the primary objective.

It should be understood, however, that a very large part of the Active Army has participated as individuals, while assigned to Continental United States (CONUS) based units, in training at the NTC and its desert environment. This is particularly true among the small-unit leaders and those personnel who normally occupy key command and staff positions. As an example, the NTC has trained almost 3,000 company commanders, 4,000 platoon leaders, 26,000 officers and 100,000 noncommissioned officers in total. This leader expertise from the NTC seedbed has been spread throughout the Army and provides a training experience that is applicable against potential enemies worldwide.

197TH INFANTRY BRIGADE READINESS

Question. How long did it take to validate the 197th Infantry Brigade as being prepared to do its mission in the Persian Gulf?

General Burba. Prior to deploying to Southwest Asia, the 197th Infantry Brigade reported a readiness level of ~~DEFERRED~~. The unit had regularly participated in rotations at the National Training Center (NTC). Their last rotation was 20 February thru 15 March 1990 (Rotation 90-6). Additionally, the 197th Infantry Brigade's home station training program contributed heavily to the maintenance of a sustained state of combat readiness; therefore, it was felt they were mission capable upon deployment. Upon deployment the responsibility for overseeing the Brigade's in-theater efforts was passed to the overseas command. The 197th Infantry Brigade continued to train as a part of the 24th Infantry Division (M) and the XVIII Airborne Corps. Their deployment into the operational area provided an excellent opportunity to become acclimated and to fine tune their combat readiness capability.

REQUIREMENT FOR GUARD VALIDATION

Question. Why did the National Guard Brigades have to be validated at NTC when the Active duty brigades didn't?

General Burba. We don't send everyone to the NTC for validation. It is a training center and that remains its mission. The National Guard brigades were sent to the NTC to achieve combat readiness because with its maneuver areas, instrumented battlefield, dedicated Opposing Force (OPFOR), and experienced observer/controllers, we could accomplish it there faster than at any other place. Validation occurred when combat readiness was achieved.

The Active brigades did not go to the NTC because they were combat ready and time did not permit additional training there prior to deployment.

TWENTY-FIVE PERCENT BUILD-DOWN—BASE FORCE CONCEPT

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, Tuesday, March 12, 1991.

The committee met, pursuant to notice at 10 a.m., in room 2118, Rayburn House Office Building, Hon. Les Aspin (chairman of the committee) presiding.

STATEMENT OF HON. LES ASPIN, A REPRESENTATIVE FROM WISCONSIN, CHAIRMAN, HOUSE ARMED SERVICES COMMITTEE

The CHAIRMAN. The committee will come to order. This morning the Armed Services Committee continues its examination of America's national security requirements in the post Cold War era.

We are reviewing the impact of two historic events: first of all, the decline of the Warsaw Pact threat, and the second is war in the Persian Gulf.

We want to see how the effect of those two issues will play on how we conduct our defense business and on our projections for the defense forces.

Today we will inquire into the status of the 25 percent force structure reduction. Last year the administration and Congress generally agreed that changes in the Soviet threat and the domestic budget pressure allowed us to begin planning for a smaller military.

Now we want to ask about the next step. The administration has proposed an organizing principle called the Base Force concept which it will use in sizing and shaping our future forces.

Gen. Colin Powell, the Chairman of the Joint Chiefs of Staff, has described it as four basic military packages; a strategic forces package, an Atlantic forces package, Pacific forces package, and the contingency forces package.

The Base Force concept represents a major change in military policy. The question is just exactly how does it work, how does it match forces to strategy.

Some of the success of Desert Storm can be attributed to the organizational changes which came about as part of the Goldwater-Nichols Act. How will the Base Force concept affect our current command structure? Could Desert Storm have been carried out as well under the Base Force concept and the Base Force framework.

We are pleased today to have as witnesses to address these and other questions two very, very important people in the formulation and the implementation, if it comes to that, of this Base Force concept.

We have Adm. David Jeremiah, who is the Vice Chairman of the JCS, and Mr. I. Lewis Libby, who is the Principal Deputy Under Secretary of Defense for Policy and Resources.

Gentlemen, we look forward to your testimony, but before we do that, let me call on Bill Dickinson for a few words.

STATEMENT OF HON. WILLIAM L. DICKINSON, A REPRESENTATIVE FROM ALABAMA, RANKING MINORITY MEMBER, HOUSE ARMED SERVICES COMMITTEE

Mr. DICKINSON. Thank you very much, Mr. Chairman.

Secretary Libby and Admiral Jeremiah, I'd like to add my welcome to those of the Chairman and the full committee.

On August 2, the same day that Saddam Hussein overran Kuwait, the President announced a new national defense strategy called the Base Force concept. Because of our preoccupation with Iraq and Kuwait, it has taken some time for us to focus or to refocus our attention on the President's proposal to overhaul the way America will meet her defense needs in the time of declining Soviet threat and reduced defense spending.

I caution you that your task today will not be an easy one because this committee expects you to put a lot of flesh on the bones of the Base Force concept skeleton. It will not be sufficient, for instance, for you to just draw the committee a picture of how many divisions, air wings, carrier battle groups, and so forth, we will need. We will require you to tell us the process that DOD went through to determine the amount and type of forces we will need. Only by understanding the subjective and objective criteria by which DOD allocated its limited resources can we judge whether this Nation will have the right force for future threats.

At the heart of this hearing are underlying questions about the historic roles and missions of the services. The committee has assumed that since we are reducing our armed forces to the lowest levels since World War II, that we must challenge the traditional rules by which we have built our past forces. New realities demand new rules for national resource allocation. Unless you can provide sound reasons why, for example, six or five Army light divisions and five light Marine expeditionary brigades, as well as 12 Navy carrier battle groups, in addition to 26 Air Force tactical fighter wings, remain the best allocation of national resources, it is difficult for us to make a conclusion.

This hearing is not an attempt to do away with or lessen the role of any single service. It is, however, an effort by the committee to ensure that, as Desert Storm has taught us, our national security needs are met by a proper flexible mix of all forces, not an overreliance on any one service.

So, gentlemen, we look forward to your testimony. We appreciate your appearance here today.

Thank you, Mr. Chairman. I will yield back.

The CHAIRMAN. Thank you, Mr. Dickinson.

Gentlemen, the floor is yours. We begin with Mr. Libby.

STATEMENT OF HON. I. LEWIS LIBBY, PRINCIPAL DEPUTY
UNDER SECRETARY OF DEFENSE (STRATEGY AND RESOURCES)

Mr. LIBBY. Thank you, sir.

The CHAIRMAN. Mr. Libby, you have to pull the microphone very close to you to make sure you are heard properly.

Mr. LIBBY. Does that refer to content or volume?

The CHAIRMAN. We are only worried about volume here. We will leave you with the content problem.

Mr. LIBBY. You have the right guy.

I have a longer written statement, sir, for the record, but if I may, I would like to summarize a little bit of it for you.

The CHAIRMAN. Without objection, any of the statements of any of the witnesses will be included in the record.

Mr. LIBBY. Mr. Chairman, as you noted, we meet in an era of remarkable change and considerable uncertainty. I am pleased to discuss with you today the new defense strategy that underlies both our planning and the budget you have before you.

I am accompanied by the Vice Chairman of the Joint Chiefs of Staff, Admiral Jeremiah, who will discuss in some detail our planned forces for the future that are derived from this strategy.

As noted already, last August 2nd, in Aspen, Colorado, the President first presented the outline of our Nation's new post Cold War defense strategy. A strategy focused less on the near-term Soviet threat to Western Europe and more on regional conflicts and longer-term challenges and opportunities.

Ironically, that same day the world was confronted with a crucial regional threat to this new era as Saddam Hussein invaded Kuwait.

In testimony over the past several weeks, the Secretary of Defense and the Chairman of the Joint Chiefs of Staff have elaborated on our new defense strategy in some detail. I am advised that the committee is particularly interested in the impact of two historical events, the remarkable changes in the Persian Gulf, to which you referred earlier, and the threats and challenges confronting the United States in this new era. Accordingly, in discussing the new strategy, I will begin my remarks with the discussion of those two issues.

The revolutionary change in the nations of Eastern Europe has been more wide ranging than anything we have seen in the last 40 years. Noncommunists now lead in most of the former non-Soviet Warsaw Pact states. Germany has been unified in NATO. The Soviet Union is unilaterally reducing its general purpose forces and has taken steps toward reform at home. It has agreed to withdraw its troops in Czechoslovakia, Hungary, and Germany, and negotiations on troop withdrawal from Poland continue. The military structure of the Warsaw Pact, which had largely ceased to be effective last year, is set to be formally dissolved by April 1st. In short, a great strategic shift sought by the West for over 40 years has occurred.

Militarily, what is most remarkable about this year of remarkable change is the passing of the threat that has so preoccupied the post-World War II era—the canonical Warsaw Pact threat of a sudden massive invasion of Western Europe. As President Bush

and Secretary Cheney have each pointed out, this canonical threat should no longer drive our military planning for the mid to late 1990s.

Since last winter, as the Defense Department has planned forces for the mid to late 1990s, it has had certain preconditions in mind to mark the passing of this traditional threat.

The Soviets must complete their withdrawal from Eastern Europe as promised. This provides strategic depth NATO has previously lacked.

The Soviets must reduce to CFE-like levels of rough parity west of the Urals. This diminishes the great historical imbalance we have faced.

The Soviets must maintain progress toward internal, political and economic reforms. This gives us some confidence in their direction away from the militaristic policies of the past. Western forces must retain sufficient cohesion for defense for force is relative.

Recently, however, worrisome events have raised questions about the prospects for needed economic and political reform and the Soviet Union's future course. As Secretary Cheney has testified previously, the moves toward democracy and demilitarization of the Soviet Union that we all welcomed now appear to be in doubt.

Uncertainty plagues virtually every aspect of Soviet society. Some once felt the tide of reform was irresistible. Some of these same people now fear the backwash. Economic, political, ethnic, and inter-republic troubles abound.

The economic situation is particularly bleak. In October 1990, the central government rejected the Shatalin plan, the program with the greatest prospect to move the Soviet economy in the direction of marketization. Most experts, including Soviet economists, agree that the prospect are for further significant decline.

As we meet today, labor strife troubles the coal mining centers of the Slavic heartland. Notwithstanding President Gorbachev's recent attempt to reposition himself, it is difficult to discern a strategy at the center for dealing with the staggering economic problems or for regenerating the process of reform.

Political reform has also been under attack. The resignation of leading liberal figures, like Foreign Minister Shevardnadze, is, of course, well known to this committee, as is the crackdown in the Baltic States. Over the past few weeks, large pro-reform demonstrations have been held in Moscow. Many believe that the center increasingly relies on the traditional pillars of Soviet power—the military industrial complex, the security forces, and the Communist party apparatus.

The U.S.-led coalition's success in the Persian Gulf will have its own effects on Soviet politics. Soviet cooperation furthered success in countering Hussein's aggression. But there are already some Soviets who see U.S. success over a longstanding client so near to their borders as a threat to traditional Soviet interests, rather than as proof of how much can be accomplished when the Cold War patterns are abandoned.

The great victory of U.S. equipment in the Persian Gulf war may well strengthen the legacy of Marshall Ogarkov who worried in the early 1980s that coming military technological revolution would leave the Soviet Union behind. This war could be considered the

third great defeat of Soviet equipment or forces in a dozen years, with the first being over Lebanon in 1982 and the second Afghanistan. Some Soviets will conclude that the lesson to be drawn from this defeat is the continued need for greater openness to the West and the futility of continued competition along past lines, others will call for allocating more resources to the military and moving further away from reform.

In the absence of ongoing democratic reform, the prospects for a transformed U.S.-Soviet relationship will dramatically decline. This does not necessarily mean that we would return to the darkest days of the Cold War, but our hopes for moving from persistent confrontation to wide-ranging cooperation with the Soviet Union may be frustrated.

It is not foreordained that reform will fail. President Bush has said on many occasions that we hope the process of reform in the Soviet Union will succeed. We still hope it will be successful, and Soviet leaders, we believe, still have it in their power to take steps which would put reform back on track.

The implications of these conflicting trends for the nature of the Soviet military threat must be weighed in several areas. The most fundamental implication is enormous uncertainty about development inside the Soviet Union. In addition, turmoil in the Soviet Union could well spill over its borders to the detriment of the emerging democracies in Eastern Europe. As Czech President Vaclav Havel said not long ago, "We are in the direct neighborhood of a colossus undergoing very dramatic change." The East Europeans will be increasingly concerned about their security.

Second, the prospects for arms control are in doubt.

Third, throughout even this time of Gorbachev, it must be remembered that the Soviets not only retain significant strategic capability, but are modernizing it. The USSR also continues to modernize its defenses. While we seek to capitalize on the significant reductions in conventional capabilities, we must recognize the continued importance of maintaining robust strategic offensive and defensive capabilities.

Fourth, we must continue to assume that the Soviet Union will field a modern well-equipped conventional force of 2 to 3 million men, the largest army by far in Europe. Nonetheless, the Warsaw Pact is dead. The U.S.S.R. will very likely continue withdrawing forces from Eastern Europe. Moreover, the Soviet military is not able to insulate itself completely from the economic decline and broader social illness that grips the Soviet Union. Some of its capabilities inevitably will be degraded whatever the Soviet attitude toward improved relations with the West.

Finally, the continued strength of the NATO alliance and our role within it remains essential to peace. Our presence will provide reassurance and stability as the new democracies of Eastern Europe mesh themselves into the larger and evolving Europe and the Soviets weather their current course.

It is now commonplace that we have moved beyond containment, a concept first set forth by George Kennan in an article in 1947. A post-containmentment review of that article reveals a prophetic assessment of the strengths that would lead us safely through the Cold War. I quote, "The course of Soviet-American relations is in es-

sence a test of the overall worth of the United States as a Nation among nations. The United States need only measure up to its best traditions."

These same attributes will be the key to the post-Cold War era. They have already been apparent in the first success of that era, the crisis in the Persian Gulf.

To safeguard our interest in the Gulf, we will need a newly strengthened regional security structure. The structure that was in place on August 2nd failed and that failure proved costly.

It is much too early for a definitive description of a regional security structure which is even now being debated. For our part, we are consulting with our coalition partners about longer-term security arrangements.

Our conception of the new security structure will be influenced by several factors. First, we must strive to constrain the capabilities for future aggression. We must work to ensure that there will be no reconstruction of an offensive threat of the sort we saw before. This will require tighter international measures to proscribe possible nuclear, biological and chemical weapons programs.

Second, the Gulf states will have the primary responsibility for defending themselves. But the countries of the Arabian Peninsula will continue to need outside help to ensure a stable and secure region. Operation Desert Storm's success enhances the standing of our friends in the region and their ability to work together toward their own stability and security.

Third, we envision that continued U.S. military presence is needed in the region to reassure our allies that we are prepared to help maintain the security arrangements that emerge. I believe there is now enhanced recognition and acceptance of such a role for us among our friends in the region.

But as the President and Secretary Cheney have made clear, we do not desire to have large ground forces or permanent bases in the region. With Operation Desert Storm's objectives accomplished, the world will witness a massive and swift drawdown of U.S. forces in the Gulf. However, we see the need for a substantial presence, perhaps achieved by a combination of periodic exercises and rapid reinforcement capabilities in addition to naval deployments.

More generally, the Gulf crisis reminds us of the sobering truth that local sources of instability will continue to foster conflicts, small and large, across the globe. Regional crises are likely to arise or to escalate unpredictably and on very short notice. There is often no substitute for U.S. leadership in areas of concern to us. Such crises will require, if necessary to respond, that we be able to do so rapidly, often very far from home and against hostile forces that are increasingly well armed with conventional and unconventional capabilities.

One implication for future regional conflicts emerging from Hussein's aggression is the need for tighter arms transfer and proliferation controls worldwide. A related implication for future regional conflicts that clearly emerges is the military and political importance of enhancing defenses to counter missile proliferation.

Third, it will serve us well in regional crises to maintain a robust technological edge across the board in military capabilities. Opponents in regional conflicts will possess some sophisticated systems,

but they are unlikely to possess the across-the-board technical sophistication we faced with the Soviet Union. In such conflicts, the breadth of our abilities will prove a lasting advantage.

Fourth, our own ability to field reinforcement rapidly will need to be improved as well as our ability to work effectively with friends and allies in combined military operations far from our shores.

Fifth and finally, the importance of being able to focus intelligence efforts is clear on specific regional threats as well and in the changing situation in the Soviet Union.

The dramatic events of the past 2 years clearly show us the difficulty of predicting events in the international environment. The recent Gulf War follows a decade of profound shifts in political alignments in the region, but the precise timing of it took even Arab observers by surprise. The Cold War itself, for four decades the central feature of international relations, confounded most of the experts when it emerged and confounded them again with the speed of its departure. Much the same can be said of dramatic events earlier in this century.

Other profound changes will be technological. To plan forces and capabilities now for even the most immediate future, the U.S. must be sensitive to the inevitable uncertainties about the threat it will confront. This is particularly true given the long lead times, sometimes a decade or more, needed to develop, build, and field major systems or new capabilities. Uncertainty thus exerts its own powerful influence on how U.S. forces are shaped because it underscores the importance of hedging against the unexpected threats that can emerge more rapidly than forces can be designed to counter them.

As the President stated on August 2nd, the easing of superpower competition gives us the opportunity to reduce our force levels within prudent levels of risk. Yet as the August 2nd invasion of Kuwait demonstrated, events will be no more predictable and defense needs no easier to discern in this new era. We will need to be poised to shape distant events and, if necessary, respond to distant regional contingencies that threaten our interest as we have in Operation Desert Storm. We will have to peer into longer warning periods to discern strategic changes in the Soviet Union or other potential global threats. We will have to maintain the ability to reconstitute needed forces.

But we will face these new challenges as we faced those of the Cold War ultimately strengthened by those elements of our democratic society that makes us inventive, determined, and an enduring source of hope for others.

Thank you, sir.

PREPARED STATEMENT OF HON. I. LEWIS LIBBY

Mr. Chairman, we meet in an era of remarkable change and considerable uncertainty. I am pleased to discuss with you today the new defense strategy that underlies both our planning for this changing future and the budget you have before you. I am accompanied by the Vice Chairman of the Joint Chiefs of Staff, Admiral Jeremiah, who will discuss in some detail our planned forces for the future that are derived from this strategy.

Last August 2, in Aspen, Colorado, the President first presented the outline of our nation's new post-Cold War defense strategy--a strategy focused less on the near-term Soviet threat to Western Europe and more on regional conflicts and longer-term challenges and opportunities. Ironically that same day the world was confronted with a critical regional threat to this new era--Saddam Hussein had invaded Kuwait.

In testimony over the past several weeks, the Secretary of Defense, the Deputy Secretary, the Chairman of the Joint Chiefs of Staff and others have elaborated on our new defense strategy in some detail. I am advised that the Committee is particularly interested in the impact of two historical events -- the remarkable changes in the Soviet Union and the Gulf War -- on the threats and challenges confronting the United States in this new era. Accordingly, in discussing the new strategy, I will begin my remarks with a discussion of these two issues.

Implications of the "The Revolution of 1989" and its Aftermath

We have had two years of remarkable change in the strategic environment. The revolutionary change in the nations of Eastern Europe has been more wide-

ranging than anything we have seen in the last forty years. Noncommunists now lead in most of the former non-Soviet Warsaw Pact states. Germany has been unified in NATO. The Soviet Union is unilaterally reducing its general purpose forces and has taken steps toward reform at home. It has agreed to withdraw its troops from Czechoslovakia, Hungary and Germany, and negotiations on troop withdrawal from Poland continue. The military structure of the Warsaw Pact, which had largely ceased to be effective last year, is set to be formally dissolved by April 1st. In short, a great strategic shift, sought by the West for over forty years, has occurred.

Militarily, what is most remarkable about this year of remarkable change is the passing of the threat that has so preoccupied the post-World-War-II era -- the canonical Warsaw Pact threat of a sudden, massive invasion of Western Europe. As President Bush and Secretary Cheney have each pointed out, this canonical threat should no longer drive our military planning for the mid- to late-1990s.

Since last winter, as the Defense Department has planned forces for the mid- to late-1990s, it has had certain preconditions in mind to mark the passing of this traditional threat:

- The Soviets must complete their withdrawal from Eastern Europe as promised. (This provides strategic depth NATO has previously lacked.)
- The Soviets must reduce to CFE-like levels of rough parity west of the Urals. (This diminishes the great, historical imbalance.)
- The Soviets must maintain progress toward internal political and economic reform. (This gives us some confidence in their direction away from the expansionist, militaristic policies of the past.)
- Western Forces must retain sufficient cohesion for defense, even at reduced levels which facilitate of force balance within CFE goals. (Force is relative.)

Recently, however, worrisome events have raised questions about the prospects for needed economic and political reform and the Soviet Union's future course. As Secretary Cheney has testified previously, the moves towards democracy

and demilitarization of the Soviet Union that we all welcomed now appear to be in doubt.

Uncertainty plagues virtually every aspect of Soviet society. Reactionaries and reformers contend in unprecedented ways. Some once felt the tide of reform was irresistible. Some of these same people now fear the backwash. Economic, political, ethnic, and inter-republic troubles abound.

The economic situation is particularly bleak. Since October 1990, when the central government rejected the Shatalin plan, which most experts on the Soviet economy regarded as the program with the greatest prospect to move the Soviet economy in the direction of marketization, economic reform has been in retreat. As a result, the Soviet economy continues to shrink; and most experts, including Soviet economists, agree that the prospects are for further, significant decline.

Gorbachev has repeatedly, most recently during his recent series of speeches in Byelorussia, noted that "we can't go on living like this." He has insisted that his program would dismantle the old command-administrative economy and allow the Soviet Union to compete with the West as a normal member of the international economic community of nations. But the prognosis now appears to be further economic decline and continued political, national and social unrest. As we meet today, labor strife troubles the coal mining centers of the Slavic heartland. Notwithstanding Gorbachev's recent attempt to reposition himself, it is difficult to discern a strategy at the center for dealing with the staggering economic problems or for regenerating the process of reform.

Political reform has also been under attack. The resignation of leading liberal figures like Foreign Minister Shevardnadze is, of course, well-known to the members of the committee, as is the crackdown in the Baltic states. The political conflict in the Soviet Union is intensifying. There are vigorous campaigns of public criticism by both reactionary Communist figures, and leading reformers. Over the past few weeks, large pro-reform demonstrations have been held in Moscow. Similar demonstrations have been held in a number of other cities of the Russian Republic. The central government, in response to these public assemblies, has denounced the "pseudodemocratic" opposition. Many also believe that the center increasingly

relies on the traditional pillars of Soviet power -- the military-industrial complex, the security forces, and the Communist party apparat.

The US-led coalition's success in the Persian Gulf war will have its own effects in Soviet politics. Soviet cooperation furthered success in countering Saddam's aggression. But there are already some Soviets who see U.S. success over a long-standing client so near to their borders as a threat to traditional Soviet interests, rather than as proof of how much can be accomplished when cold war patterns are abandoned.

Moreover, for some time the Soviets have been writing about a military technological revolution that lies just ahead. They liken it to the 1920s and 1930s, when revolutionary breakthroughs--such as the blitzkrieg, aircraft carriers, and amphibious operations--changed the shape and nature of warfare. This revolution will pose enormous difficulties, not just technologically, but in the development of doctrine and operational concepts. Belief in this revolution and the need for greater openness to compete in it helped spur Soviet "new thinking."

The great victory of US equipment in the Persian Gulf war may well strengthen the legacy of Marshall Ogarkov who worried in the early 1980s that the next military technological revolution would leave the Soviet Union behind. This war could be considered the third great defeat of Soviet equipment or forces in a dozen years--with the first being over Lebanon in 1982 and the second in Afghanistan. The deficiencies of Iraqi morale or tactics cannot wholly account for the enormous disparity in the numbers of forces lost. While some Soviets will conclude that the lesson to be drawn from this defeat is the continued need for greater openness to the West and the futility of continued competition along past lines, others will call for allocating more resources to the military and moving away from reform.

In the absence of ongoing democratic reform, the prospects for a transformed US-Soviet relationship will dramatically decline. This does not necessarily mean that we would return to the darkest days of the Cold War, but our hopes for moving from persistent confrontation to wide-ranging cooperation with the Soviet Union may be frustrated.

It is not foreordained that reform will fail. President Bush has said on many occasions that we hope the process of reform in the Soviet Union will succeed. We still hope it will be successful and Soviet leaders, we believe, still have it in their power to take steps which would put reform back on track.

The implications of these conflicting trends for the nature of the Soviet military threat must be weighed in several areas. The most fundamental implication is the reality of the enormous uncertainty about developments inside the Soviet Union. This is, in itself, of enormous concern. In addition, turmoil in the Soviet Union could well spill over its borders to the detriment of the emerging democracies in Eastern Europe. As Czech President Vaclav Havel observed not long ago, "We are in the direct neighborhood of a colossus undergoing very dramatic change." The Soviet Union's neighbors may face large flows of refugees. The East Europeans will be increasingly concerned about their security.

Second, the prospects for arms control are in doubt. There is still, at this time, no resolution on START. We have serious, unresolved differences with Moscow over the agreement to reduce Conventional Forces in Europe (CFE). Regrettably, these setbacks in arms control seem to demonstrate the spillover effects of the resurgent influence of the military and reactionary elements on the Soviet government. Nevertheless, we remain hopeful that we may yet conclude meaningful arms control agreements with the Soviets.

Third, throughout even this time of Gorbachev, it must be remembered that the Soviets not only retain significant strategic capability but are modernizing it virtually across the board. It is expected that Soviet nuclear forces will be fully modernized by the mid-1990s, including Typhoon/Delta IV submarines, SS-24 and SS-25 missiles and follow-ons to each, and a new highly accurate version of the SS-18 missile. They will also modernize their air-breathing forces with the ALCM-carrying Bear-H, Blackjack and Backfire bombers, among other improvements. In all, we see five or six new Soviet long-range ballistic missiles under development. The USSR also continues to modernize its strategic defenses. While we seek to capitalize on the significant reductions in conventional capabilities, we must recognize the continued importance of maintaining robust strategic offensive and defensive capabilities.

Fourth, we must continue to assume that the Soviet Union will field a modern, well-equipped conventional force of 2-3 million men, the largest national army by far in Europe. Nonetheless, the Warsaw Pact is dead. The USSR will, very likely, continue withdrawing forces from Hungary and Czechoslovakia, withdrawals which are well on their way to completion this summer. Despite some recent difficulties, we anticipate that withdrawal from Germany and Poland in 1994 on a schedule yet to be determined. The Soviet military is not able to insulate itself completely from the economic decline and broader social illness that grips the Soviet Union. As a consequence some of its capabilities inevitably will be degraded, whatever the Soviet attitude toward improved relations with the West.

Finally, the continued strength of the NATO alliance and our role within it remain essential to peace. We share with our allies in Western Europe a common history and heritage—a shared commitment to freedom and individual rights, and we will stay in Europe with a credible presence as long as we are welcomed. As Europe works through the political, economic and security challenges of this new era, and discovers a new identity, there will be pressures and temptations to question fundamental elements of our trans-Atlantic commitments. These ties must not weaken. Our presence will provide reassurance and stability as the new democracies of Eastern Europe mesh themselves into a larger and evolving Europe and the Soviets weather their current course. Indeed, in the course of the debate over German reunification and in numerous private discussions with Soviet officials, they have often recognized the continued importance of NATO.

It is now a commonplace that we have moved "beyond containment," a strategy first articulated in a 1947 article by George Kennan. A post-containment review of that article reveals a prophetic assessment of the strengths that would lead us safely through the Cold War:

"The course of Soviet-American relations is in essence a test of the overall worth of the United States as a nation among nations....[T]he United States need only measure up to its best traditions...."

These same attributes will be the key to the post Cold-War era. They have already been apparent in the first success of that era—the Persian Gulf crisis.

IMPLICATIONS OF THE GULF WAR

We have emerged successfully from the Cold War and now, suddenly in its aftermath, we, with our coalition partners, have won the first hot war to challenge our progress toward the more peaceful world order we seek for the 1990s and beyond. Our successful effort to liberate Kuwait showed that when friends in this vital region were threatened by Saddam Hussein's barbaric aggression, the United States accepted responsibility, marshaled an unprecedented international coalition, secured the support of the United Nations, and was willing, after exhausting all peaceful means, to take action to restore peace and stability.

Our initiative in the Gulf has laid the groundwork for a new, U.S.-led multinational approach to sharing responsibility for security of this critical region. The conflict has also highlighted some more general lessons for our own future strategy.

In the aftermath of our great victory, concerns for the region remain. It is not in our interests for any nation to exercise hegemony over a region so crucial to our interests and so rife with conflict. Saddam Hussein with his disproportionately large military forces was seeking such hegemony. At the other end of the extreme, the total evisceration of Iraq would itself create dangerous pressures. We must work to ease and manage these and other regional tensions, while remaining realistic in our expectations.

Moreover, to safeguard our interests in the Gulf, we will need a newly strengthened regional security structure. The structure that was in place on August 2nd failed, and that failure proved very costly.

It is much too early for a definitive description of a regional security structure, which is even now being debated. In any event, the impetus for change must come from the leading governments in the region itself. For our part, we are consulting with our coalition partners about longer-term security arrangements. Our conception of the new security structure will be influenced by several factors. First,

we must strive to constrain the capabilities for future aggression. The situation is already different from the military circumstances of August 2nd, or January 16; Operation DESERT STORM has changed the regional balance dramatically. Yet, absent a sensible post-crisis policy, these gains could prove short-lived. We and the international community must work to ensure that there will be no reconstruction of such an offensive threat. This will require tighter international measures to proscribe Iraq's nuclear, biological and chemical weapons programs, plus the associated delivery systems, along with guarding against a return to dangerous imbalances in conventional forces.

Second, the Gulf states will have the primary responsibility for defending themselves, but the countries of the Arabian Peninsula will continue to need outside help to ensure a stable and secure region. DESERT STORM's success enhances the standing of our friends in the region and their ability to work together toward their own security. One of the points that Saddam tried to obscure with his disinformation and propaganda is the fact that the majority of the Arab world -- the peoples of Egypt, Saudi Arabia, Syria, and the Gulf states -- were solidly with the coalition's successful opposition to the Iraqi invasion and pillage of Kuwait. That mutually supportive relationship with our Arab coalition partners will continue to be necessary as we look to our long term interests in this historically troubled region.

Third, we envision that continued US military presence is needed in the region to reassure our allies that we are prepared to help maintain the security arrangements that emerge. I believe there is now enhanced recognition and acceptance of such a role for us among our regional friends. But as the President and Secretary Cheney have made clear, we do not desire to have large ground forces or permanent bases in the region. With Operation DESERT STORM's objectives accomplished, the world will witness a massive and swift drawdown of US forces in the Gulf. However, we foresee the need for a substantial presence -- perhaps achieved by a combination of periodic exercises and rapid reinforcement capabilities in addition to naval deployments. If we ever have to send significant US forces to the region again, we must be able to do so faster than we did this time.

More generally, the Gulf crisis reminds us of the sobering truth that local sources of instability and oppression will continue to foster conflicts small and large virtually across the globe. The Gulf conflict has illustrated, once again, that regional

crises and conflicts are likely to arise, or to escalate, unpredictably and on very short notice, that regional crises can be militarily challenging, and that there is often no substitute for US leadership in areas of concern to us. Such crises will require, if necessary to respond, that we be able to do so very rapidly, often very far from home, and against hostile forces that are increasingly well-armed with conventional and unconventional capabilities.

One implication for future regional conflicts emerging from Hussein's aggression is the need for tighter arms transfer and proliferation controls world-wide. The risks if we fail to do so are severe. We cannot allow the end of cold war-level tensions to open further the door to the transfer of unconventional or ballistic missile systems. By the year 2000, it is estimated that at least 15 developing nations will have the ability to build ballistic missiles--eight of which either have or are near to acquiring nuclear capabilities. Thirty countries will have chemical weapons, and ten will be able to deploy biological weapons as well.

A related implication for future regional conflicts that clearly emerges from the current crisis is the military and political importance of enhancing defenses to counter missile proliferation. Patriot missiles have demonstrated the technical efficacy and strategic importance of missile defenses. This underscores the future importance of developing and deploying a system for Global Protection Against Limited Strikes (GPALS) to defend against limited missile attacks -- whatever their source. As President Bush said, "Thank God that when the Scuds came--the people of Israel and Saudi Arabia, and the brave forces of our coalition had more to protect their lives than some abstract theory of deterrence."

Third, it will serve us well in regional crises to maintain a robust technological edge across the board in military capabilities. The problem of proliferation of both conventional and unconventional armaments is not limited to Iraq: there are other regional powers with modern armored forces, sophisticated attack aircraft and integrated air defenses, anti-ship cruise missiles, and even modern diesel submarines. Transfers of Cold-War surplus, tightening economic pressures on international arms dealers, and increased indigenous technical capability in the Third World will only make this problem worse. Opponents in regional conflicts are unlikely to possess the across-the-board technical sophistication of the USSR. But, it will not be uncommon for our forces to face "spikes" of high technology--either

conventional or unconventional systems--in third world confrontations. In such conflicts, the breadth of our abilities will prove a lasting advantage.

A fourth implication is the importance of being able to focus intelligence efforts more on specific regional threats in the post-Cold war world. This is not simply a matter of redirecting our intelligence specialists from the study of the Soviet Union to concentration on other areas. We will need, if anything, to continue our close attention to the Soviet Union and the increasingly diverse activity we must understand there as we also track developments in other regions.

Fifth, our own ability to field reinforcements rapidly will need to be improved, as well as our ability to work effectively with friends and allies in combined military operations far from our own shores. Developing logistics and lift capability will be critical elements of post-war planning. To facilitate the smooth integration of allied military forces in any future crises, we will highlight the importance of frequent combined exercises and of the interoperability of major weapon and support systems.

Uncertainty and Other Challenges

Particularly after the dramatic events of the past two years, we can see clearly the difficulty of prediction in the international environment. A review of modern history, however, reveals more broadly the challenge of predicting the pace and nature of change. Dramatic changes have attended nearly every decade of this century.

Some of these shifts are political-military. The current war in the Gulf follows a decade of profound shifts in political alignments by Iraq, Iran, and others in the Southwest Asia region -- and no doubt will itself have significant effects on future alignments -- but the precise timing of it took even Arab observers by surprise. The Cold War itself, for four decades the central feature of international relations, confounded most of the experts when it emerged and confounded them again with the speed of its departure. Much the same can be said of dramatic events earlier in this century.

Other profound changes are technological. The developments and counter-developments of long-range bombers, radar, missile defenses, PGMs, and stealth, illustrate the strategic importance of technological change. Arguably the pace of such changes is increasing, now driven by the military-technological revolution discussed above.

To plan forces and capabilities now for even the immediate future, the US must be sensitive to the inevitable uncertainties about the threat it will confront. This is particularly true given the long lead-times -- sometimes a decade or more -- needed to develop, build, and field major systems or new capabilities. Uncertainty thus exerts its own powerful influence on how US forces are shaped, because it underscores the importance of hedging against the unexpected threats that can emerge more rapidly than forces can be designed to counter them.

The events of the past two years in Europe and the Middle East have been so dramatic that they tend to obscure other important challenges and long term developments. Let me briefly raise a few.

East Asia, which seems relatively calm, is not free of challenges and opportunities. While any abrupt and major changes in our security posture would be destabilizing, adjustments to our forward deployed force structure can and should be made to accommodate changing realities. Both global and regional trends indicate threats, opportunities, and uncertainties in the region that can be positively shaped by a continued American presence. We recently completed a comprehensive review of our Pacific Rim strategic framework and are trimming our forces. We have already announced cuts of 10,000 from our forces in Korea and Japan.

The U.S./Japanese relationship remains the critical linchpin of our Asian security strategy and a key to peace in the region. Despite persistent trade problems, our ties will remain strong. As Japan extends its regional economic influence, latent regional concerns may resurface that a continued US presence could help manage.

China's path after the current leadership passes from the scene is quite uncertain. China had a decade of tremendous promise when it opened to the West and made some economic reforms. But with the tragedy of Tiananmen square, China

retreated to repressive measures to sustain the regime, even at the expense of the entire nation's development.

Given the continued unpredictability of North Korean politics, the Korean peninsula will remain one of the world's potential military flashpoints. It, too, faces the challenge of a leadership transition probably in this decade. The North continues to devote an extraordinary percentage of its national wealth to maintaining over a million men under arms, at the expense of the welfare of its citizens. A key proliferation concern in East Asia is North Korea's continued unsafeguarded nuclear activities.

Finally, other concerns, in our own hemisphere and beyond, will persist. The scourge of drugs, terrorism and the plight of innocent refugees will continue to engage US interests. Conflicts smaller than a major regional contingency—for example, the conflicts we faced in Grenada or Panama—may also confront us in the coming decade. Some of these challenges require military capabilities uniquely tailored for low intensity or special operations.

THE NEW DEFENSE STRATEGY

The new defense strategy proposed by the President and the Secretary squarely confronts both the revolutionary changes creating a new world security environment and the fiscal constraints within our own country. In general, the strategy judges that the trend of reforms over the past two years in Eastern Europe and the Soviet Union allows a shift from our global strategy of containment and permits us to begin safely building down to lower force levels based on regional crises that we may face. Should these trends take unexpected and forbidding twists, or should other potent challenges emerge, the new strategy also provides a framework to adjust our capabilities accordingly.

Let me summarize briefly several key elements of the new defense strategy outlined by the President last August and the Department in recent testimony. First, we cannot ignore our interests or shirk from our responsibilities in key regions of the world; we remain committed to keeping NATO strong and to working with other friends and allies. Second, forward presence through forward deployed forces is of

critical importance to keep those relations strong, to help shape the future strategic environment in ways favorable to us, and to position us favorably to respond to emerging threats. Third is the need to maintain an ability to respond to regional threats of concern to us. Indeed, countering such regional threats will play a determinant role in sizing our active and reserve forces. Fourth, we must continue our naval predominance as an element of protecting ourselves and our far-flung interests. Fifth, we must keep an eye to the future and plan to reconstitute larger US forces if necessary to respond to a global threat, particularly a decision by the Soviets to return to a strategy of global confrontation. We will hedge against this threat by protecting key, long-lead elements of military capability. On the strategic side, we must maintain a robust ability, through both strategic offensive and defensive forces, to respond to the threats of nuclear weapons. Finally, we must maintain the quality of our military leadership and personnel, and stress innovations to keep or gain the competitive edge in key areas of warfare--both conventional and strategic.

The most important change reflected in this new strategy is that we no longer are focused on the threat of a Soviet-led, European-wide conflict leading to global war. Our strategy continues to recognize the massive conventional capabilities the Soviets will retain for the foreseeable future. Yet, we judge that the striking political and military changes in the USSR and Eastern Europe noted earlier will alter the character of the remaining Soviet threat from the capability to wage global war to a threat to a single region in Europe or elsewhere. To size and shape the forces we will need in the future, the new strategy therefore shifts its focus to regional threats and the related requirements for forward presence and crisis response. We believe we will have sufficient warning of the redevelopment of a Soviet threat of global war, so that we could reconstitute forces over time if needed.

Our program of reductions and our budget have thus been based on certain assumptions about the future strategic environment. If trends prove less favorable along the way than we first projected, we may not be able to reduce forces as fast or as far as we have planned. Remarkably, the reshaping and reducing of our forces in the budget now before you occurred in part against the backdrop of a major war in the Persian Gulf and worrisome trends in the Soviet Union. I know of no historical precedent for our country making changes of this magnitude under such conditions. This in itself is cause for due caution.

It is worth a moment to discuss a few aspects of this strategy in more detail.

- **Strategic Deterrence**

I have earlier noted that the Soviets continue to modernize their strategic nuclear arsenal at a pace that seems out of step with their positive actions in other spheres. Given all that is at stake, this is an area in which we can ill-afford to accept much risk. America must continue to maintain a diverse mix of survivable and highly capable offensive nuclear forces, as well as supporting command and control assets. At the same time as we modernize, we have planned to scale back our strategic forces in accordance with our expectations of a START agreement covering such forces. We will pursue a defensive system for global protection against limited ballistic missile strikes -- whatever their source.

- **Forward Presence**

Our new strategy emphasizes the importance of U.S. presence abroad, albeit at reduced levels. This is one of the key roles on which we will size our forces. The success of our historic strategy of forward presence should be carefully recognized. We should be slow to make changes that appear destabilizing. Recent attention has focussed on our plans to reduce our levels of forward deployed forces, especially in Europe under CFE, but also in Asia under last year's strategy initiative.

The great importance of maintaining a forward military presence may not be widely appreciated, despite its historic success. US forward military presence contributes significantly to US security and to our global political and economic influence. It is also welcomed by our allies as a vital contributor to their security. Our forward deployed forces play a critical role in deterring conflict, avoiding power vacuums, and preserving regional balances. These forces can help cement our alliances and limit proliferation by providing alternative security guarantees. Forward based ground, air, or naval forces are the most dramatic demonstration of US commitment. But, forward presence can be established through a variety of other arrangements ranging from continuous offshore naval presence to occasional naval deployments and ground and air exercises. As noted earlier, we envision using such innovative forms of forward presence in the Middle East.

While we will reduce our forward presence, there are risks in reducing too far or too fast. Secretary Cheney has likened the risks regarding reduced forward presence to thin ice: you don't know for sure how much is too little, until you've fallen through -- and then the consequences can be dire and long-lasting. To keep this risk acceptable, reductions in presence to levels near the minimum acceptable should be gradual and part of a carefully developed and agreed long-term plan. Our phased plan for reductions in Asia, including the agreement with our allies on a 10 percent reduction in our forces there by FY 1992, exemplify this commitment to keeping our forward presence as trim as possible. But we cannot, however, withdraw from the world. Our forward military presence will remain a key factor in our overall national defense strategy and in the strategies of our allies as well.

● Crisis Response

The need to respond to regional crises is one of the key elements of our new strategy and plays a significant role in how we size our active and reserve forces. We have already noted -- and we see today -- how dangerous regional threats can be to our interests. Under conditions pertaining during our policy of containment, safety demanded that we assume that a major regional conflict involving superpower interests might not stay limited to that region, but could well escalate to a global conflict. This made any single-regional conflict a "lesser-included case" or a potential precursor to a global war scenario. In contrast, we now focus on a disparate array of possible regional conflicts that we believe are more likely to remain localized.

Our forward deployed forces are complemented by effective contingency response and reinforcing forces. The combat forces needed for early response to major regional contingencies must be mobile and ready. They should be largely in the active forces. Reserve forces should help deploy and sustain active forces, while reserve combat units could add an additional increment of capability for protracted or concurrent conflicts. We should maintain the ability to deploy both heavy and light forces of significant size at great distances. Our ability to insert forces quickly--particularly heavy ground forces--into distant theaters can be greatly enhanced through prepositioning equipment either on land (POMCUS) or afloat (MPS).

• Force Reconstitution

The dramatic changes of 1989 and 1990 in Eastern Europe and the Soviet Union allow us to plan on dramatic increases in the time available to meet any renewed threat of a massive, theater-wide attack on Europe that could lead to global war. Such long warning of a renewed global threat enables us to reduce our forces in being to levels sufficient to meet the regional threats which are now our focus. This allows us to reduce our forces now, so long as we are prepared to build, as the President has said, "wholly new forces" should the need to counter a global threat reemerge.

This shift toward a force structure that relies in part on reconstitutable forces will have wide implications. These include moving beyond reliance solely on mobilizing forces in being, to planning instead for the creation of "wholly new forces." Removing units from the standing active and reserve force and retaining others only at dramatically reduced levels of resources and readiness generates substantial savings. Should we again face a global threat, we would rebuild forces--but forces configured to be effective in the new threat environment. They might be different in key ways from the units we had eliminated from the force structure. Some resources saved on reduced force structure will further key defense investment strategies, building better systems for the future. Thus the new strategy of reconstitution both saves resources and strengthens future defense by taking full advantage of lengthened warning of global confrontation.

Successful reconstitution will require that we retain those capabilities that would take longer to reconstitute than the available warning of a renewed global threat. Such critical long lead items include, particularly, technology, the industrial base, operational proficiency in key areas of warfare, and the quality of leadership and personnel.

● Innovative Technology and High Quality

Preserving resources for technological development is one of the reasons why we are willing to forego some elements of force structure. Research for our reconstitution capabilities should advance the US competitive edge in key areas of warfare through innovations in platforms, subsystems and doctrine. Research today can contribute to our ability to deter and, if necessary, defeat opponents that could develop in the mid- to long-term. One element of technology must be seeking improved manufacturing processes to retain a strong defense industrial base. We must continue to develop, prototype and field limited quantities of new weapons systems to hone our skills in new areas and develop associated operational doctrines.

It is clear that the world ahead will demand very high quality men and women in uniform, and in our civilian staffs. We must retain the high quality of our forces by carefully managing the current personnel draw-down and by paying continued attention to the quality of life for our military. Also important will be our investment in training and professional education. The members of our reduced active military, particularly our officers and senior NCOs, would be one of the most critical resources should we ever seek to reconstitute larger forces. The leadership skills of our military take years to develop and often cannot be found in the civilian economy. Similarly, some technical skills are unique to the military and require long periods of training and so could not be quickly reconstituted.

CONCLUSION

As the President stated on August 2, the easing of superpower competition gives us the opportunity to reduce our force levels within prudent levels of risk. Yet, as the August 2 invasion of Kuwait demonstrated, events will be no more predictable and defense needs no easier to discern in this new era. We will need to be poised to shape distant events and, if necessary, respond to distant regional contingencies that threaten our interests, as we have in Desert Shield. We will have to peer into longer warning periods to discern strategic changes in the Soviet Union or other potential global threats, and we will have to maintain the ability to

reconstitute needed forces. But we will face these new challenges, as we faced those of the Cold War, ultimately strengthened by those elements of our democratic society that make us inventive, determined, and an enduring source of hope to others.

The CHAIRMAN. Thank you, Mr. Libby.
Admiral Jeremiah.

**STATEMENT OF ADM. DAVID E. JEREMIAH, VICE CHAIRMAN OF
THE JOINT CHIEFS OF STAFF**

Admiral JEREMIAH. Thank you, Mr. Chairman, for the opportunity to appear before the committee today.

As Secretary Libby has indicated, in the last month Secretary Cheney and General Powell spoke to this committee and outlined for you the major elements of our national security strategy.

Secretary Cheney gave an overview of some of the strategic assumptions which Secretary Libby has worked through that underlie our planning. General Powell sketched out the emerging and enduring strategic realities at home and abroad and also described the force packages and supporting capabilities we need to meet our future defense needs.

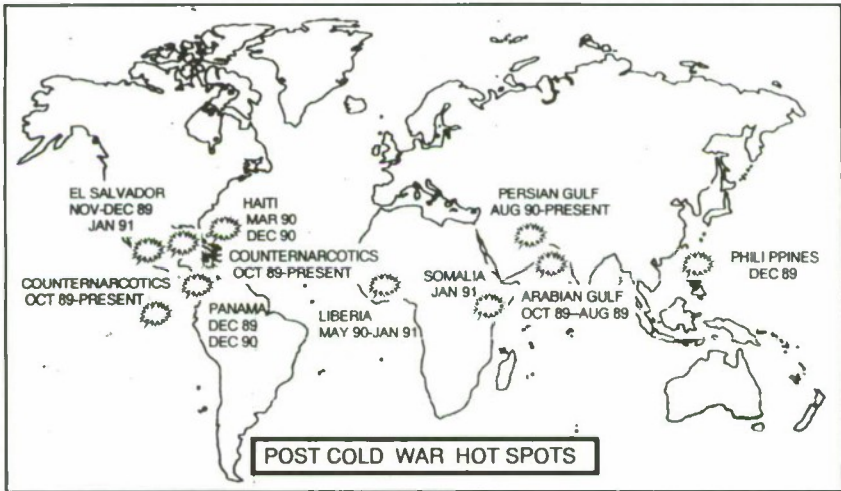
The end of the Cold War is clearly the most dramatic change to have altered the international security environment. That change had two important components for us. The first is our changed relationship with the Soviet Union which we took for granted in years past that we would be locked in an adversarial relationship and we planned our national security programs accordingly. That has now changed.

However, as Secretary Cheney pointed out to this committee last month, we are watching events in the Soviet Union closely and we do have a concern over the recent trends that seem contrary to their earlier moves toward democratization and demilitarization.

The second important component of change caused by the end of the Cold War concerns the altered geopolitical situation in Europe. However the current tensions with the Soviet Union work themselves out, the fact remains that Europe is no longer divided into two camps separated by an Iron Curtain. The Warsaw Pact is now officially a thing of the past and Soviet hegemony in Eastern and Central Europe cannot be revived even if reactionaries within the Soviet Union gain the upper hand.

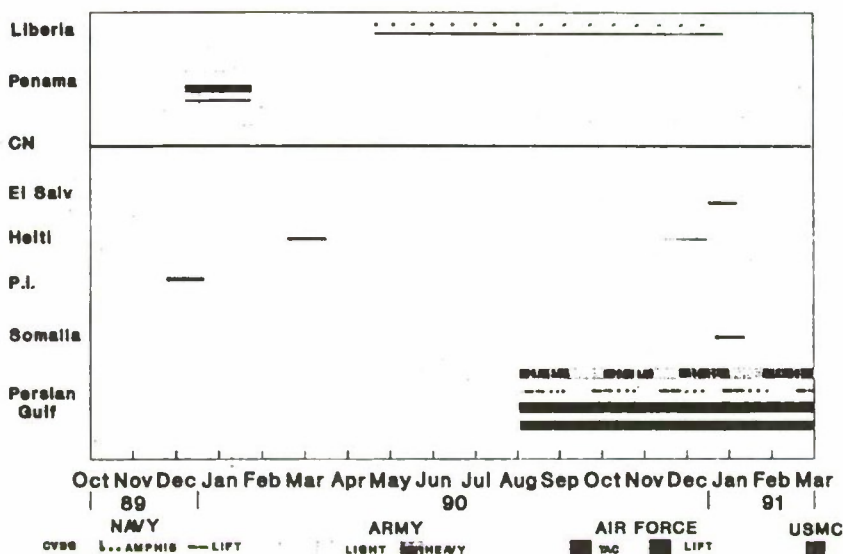
But the end of the Cold War has not brought a wholesale end to international conflicts or even the threats to our national interests. The war in the Middle East to liberate Kuwait is only the most obvious recent example. Just in the time since I was nominated to be Vice Chairman a little over a year ago, we have had a variety of incidents that have required us to use military force around the world.

I would like to point out that the charts that we show here are also in your handouts and will appear in that same sequence.



That chart shows some of the recent cases, identified by the bursts, where we have had incidents to employ U.S. forces. They did not all involve the use of lethal force, but they all required trained and readily available forces for everything from Operation Desert Shield and Desert Storm to counter-narcotics operations, from the protection of American citizens in Liberia and Haiti, to the long-range evacuation of our people from Somalia.

POST COLD WAR USE OF US ARMED FORCES



Even with the end of the Cold War, the world remains therefore full of dangers, uncertainties and challenges.

If you notice the box at the bottom which shows the duration, the simultaneity, and the level of effort required, we have been busy. The long lines represent the sequence of time, and the width of the individual marks represent the intensity of the force structure involved.

Those regional requirements, which in the past year have often placed simultaneous demands on our forces, now drive much of our strategic thinking.

President Bush specified to us the national objectives we must be prepared to support. Those objectives are the survival of the United States as a free and independent Nation; a healthy and growing U.S. economy; a stable and secure world fostering freedom, human rights and democratic institutions; and healthy, cooperative and politically vigorous relations with our friends and allies.

Implicit in a healthy, growing economy was an obligation for us to operate within the fiscal guidelines specified by the budget agreement between the Congress and the President.

To achieve those national goals, we have developed a strategy that will preserve the security of the Nation through the decade of the nineties and beyond. That strategy, its rationale, and a comprehensive assessment of our planned forces are contained in the 1991 Joint Military Net Assessment recently approved by Secretary Cheney for provision to Congress in accordance with the National Defense Authorization Act of 1989.

As explained in the Net Assessment, our strategy is shifting from its earlier focus on containing Soviet aggression to four broader-

based themes. These four themes are deterrence, crisis response, forward presence and reconstitution. Now, some of those themes are not new, but we are placing new emphasis on them in light of the receding Soviet threat and a declining defense budget. As we look to the future, those themes broadly define the capabilities we need to ensure our national security. Those themes are in turn linked to nine fundamental military strategic concepts. Those central military strategic concepts have guided our thinking in the past and will continue to do so in the future.

Our central military strategic concepts are the following.

First, deterrence. We seek to maintain a capable and credible nuclear deterrent. Likewise our ability to deter conventional aggression influences the size and character of U.S. forces along with the location and the magnitude of forward deployments and the tempo of our forward presence.

The second concept is power projection. The Desert Shield/Desert Storm Operation convincingly demonstrated the military value of power projection. No other nation on earth possesses that capability. The sealift and airlift programs, which enabled us to project forces are truly national assets, must be preserved and modernized at or above our current capabilities.

The third concept is forward presence. Forward presence includes such things as forces stationed overseas, rotational deployments, access and storage agreements, combined exercises, security and humanitarian assistance, port visits, and military-to-military relationships. But in simple terms, forward presence demonstrates the day-to-day global involvement of the United States in world events. They know we are there and interested.

Our fourth concept is reconstitution. Reconstitution begins with an industrial base capable of responding to our defense requirements. It also includes well-conceived mobilization plans and the ability to regenerate forces in the event of crisis.

The fifth concept is collective security. For more than 40 years collective security has been one of our central military strategic concepts. Today we have a strong network of alliances around the world and bilateral military relationships that have served us well. We will continue to honor these even though reductions in forward basing and lower defense budgets may reduce our overseas profile.

The sixth concept is maritime and aerospace superiority. We have essentially been able to maintain this at sea since World War II and in the air since at least 1953. Mr. Chairman, control of sea, air and aerospace lines of communication is essential to our ability to protect our global interests and to project power.

A seventh concept, is security assistance. We will continue to nurture the capability of friendly nations to protect their own national security interests, preferably in programs where we have an opportunity to interact with nations and armed forces around the world and expose them to our systems and concepts.

Eighth, arms control. Arms control has succeeded in limiting the scope of strategic arsenals and has provided a framework for reducing force structure and the level of confrontation in Europe. Arms control is not an end in itself but serves our interest by reducing military threats, increasing predictability and stabilizing force

modernization. We would hope to be able to expand that beyond the areas of Europe in the years ahead.

Our ninth and final central strategic military concept is technological superiority. Technological superiority is a hallmark of American armed forces. The recent conflict in the Middle East reaffirmed how valuable this is to us, how important it can be not only in ensuring victory but also in reducing friendly and noncombatant losses.

In addition to those central strategic concepts, two other specified military tasks require our consideration. The first is that we have been directed by the President and the Secretary of Defense to assist in the war on drug trafficking. Second, we seek to deter and defend the spread of international terrorism in cooperation with other governmental agencies.

Those central strategic concepts and tasks link our strategy to the force structure. In the past, those broad concepts have yielded a diverse force with enormous flexibility. In the future, it may well be that reduced force structure will limit that flexibility. A reduction in overall military flexibility carries with it increased risk under certain circumstances. In consideration of this, we have tried to configure our future forces in a way that minimizes that risk, and maximizes the flexibility within the given constraints.

Mr. Chairman, General Powell explained to the committee last month the four basic force packages which you mentioned earlier and the four supporting capabilities we need in the future. These force packages and supporting capabilities abide by our enduring central strategic concepts and tie our future military force structure as proposed in the Future Years' Defense Program (FYDP) through the new strategy.

The four force packages we need are our strategic force, the Atlantic force, the Pacific force, and the contingency forces you enumerated. The four supporting capabilities we require are a transportation capability, a robust space capability, a reconstitution capability and a well-developed research and development capability.

I should point out, Mr. Chairman, from the outset that those force packages and capabilities define requirements for planning purposes and do not represent command arrangements.

In developing this force structure, we did not base our analysis narrowly. I think in the past a common way of deriving force structure was to follow one of three models: one, a threat-based approach; two, a scenario-based approach; and, three, a budget-based approach.

During our analysis, we tried to use a broad-based assessment that considered the national objectives laid down by the President; the military strategy which Secretary Cheney and General Powell have laid out; the strategic concepts which I have enumerated; the current and future threats as best we can define them; regional strategies and scenario requirements; and other special considerations such as the fiscal constraints that are inherent in the national objectives and political realities.

At the same time, we took care to protect the unique capabilities such as special operations, rescue and amphibious forces, as well as missions such as counter-drug operations and disaster relief.

Last summer's program review and the fall budget review within the Department of Defense intended to ensure that our forces matched our strategy, and that our investment programs matched our forces. In some cases we had to take actions that went beyond that because of management or acquisition problems with some programs that are part of the strategy but were not coming along as we wanted them.

Now let me speak briefly to each of our force packages as we projected them during the budget development. Recognize that these are planning configurations. The mix among theaters almost certainly will change as a result of dialogue with our allies, consultations with our friends in Europe and the Gulf, regional threats and, indeed, our alliances and friends around the world.

The first package is our strategic nuclear forces. I said earlier that the end of the Cold War had transformed our relations with the Soviet. Despite those positive developments, we need to remember that the Soviet Union remains the only nation on earth able to destroy the United States. That is not likely to change in the near term. Even with the most optimistic strategic arms reduction treaties, the Soviets are unlikely to give up their strategic nuclear capability. Military power, and particularly strategic nuclear power, is their major remaining claim to superpower status. Our strategic deterrence, therefore, must remain viable.

Our downstream strategic offensive force retains the triad of submarines, guided ground-based ballistic missiles and manned bombers.

STRATEGIC NUCLEAR FORCES

- RETAIN TRIAD
- REMAIN CONSISTENT WITH ARMS CONTROL OBJECTIVES
- ELIMINATE DESTABILIZING SYSTEMS
- CONTINUE TO PURSUE DEFENSES

STRUCTURE:

- SSBN : 18 TRIDENT II
- ICBMs : 550 MISSILES
- BOMBERS : B-52H + B-1 + 75 B-2s
- DEFENSE : SDI R&D FUNDING



As shown by the chart, our strategic submarine force will ultimately consist of 18 Trident SSBNs, armed with a mix of C-4 and D-5 missiles. We project having a total of 181 strategic bombers by 1985. We will augment our B-1s with sufficient B-52's to ensure a credible bomber force during the introduction of the B-2s.

Probably the greatest potential for change lies in the structure of our land-based missile forces. To protect our future options, we will continue research and development on both the PEACEKEEPER Rail Garrison and the Small ICBM while deferring their deployment.

We also remain committed to the development of strategic defensive forces. Just as we need to have the ability to deter an attack on the United States, we should also have the capability to defend our Nation against such an attack if deterrence fails.

Given the global cottage industry in Third World missile technology and weapons of mass destruction, we should work toward defenses against limited strikes and in-theater ballistic missile defenses. I doubt that any of us will soon forget the images of Israeli and Saudi citizens scrambling for gas masks as the Iraqi Scuds flew toward them. If we can prevent it, we never want to be in a position where American citizens have to prepare sealed rooms in their homes or go about carrying gas masks.

A second force package are the Atlantic forces. These forces which include elements from all the services that will span the area presently covered by the Atlantic Command, the European Command, and the Central Command.

I should point out, Mr. Chairman, that the precise configuration of our forward Base Forces in Europe is still a subject we are working with our NATO allies in discussions as we generate our NATO strategy.

The Active and Reserve Army divisions committed to this force are primarily heavy divisions. We foresee a heavy corps of two divisions plus supporting elements remaining in Europe, in addition to some POMCUS assets.

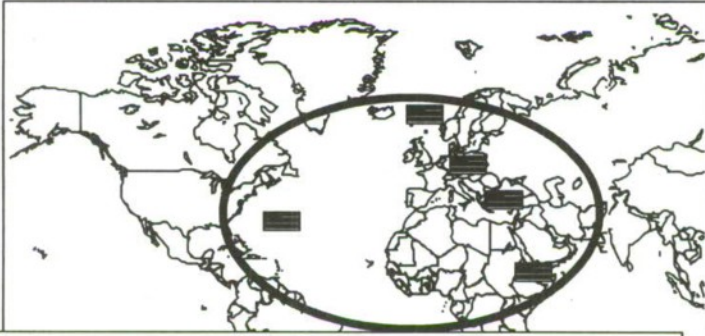
As you can see, Mr. Chairman, much of the Army reserve forces will be configured for employment in this region. It is the area where that type of reinforcement of combat power is most likely applicable.

This makes it absolutely necessary that we have adequate sea and airlift assets to assure the timely movement of these forces in the event of crisis and also to ensure that we can keep those forces supplied.

I will return to our strategic mobility requirements in a few minutes.

The Air Force will keep something like three fighter wings based in Europe backed up by both Active and Reserve wings as shown.

ATLANTIC FORCES



Army	Navy	USMC	Air Force
Europe: 2 DIVS	1 CVBG	MARG IN MED MPS	3 FIGHTER WINGS
CONUS: 4 ACTIVE 6 RESERVE DIVS (+ 2 Cadre)	5 CVBGs + SUPPORTING SHIPS	2 MEBS (PLUS 1RC)	2 ACTIVE /11 RESERVE FIGHTER WINGS

We foresee two to three carrier battle groups maintaining forward presence throughout this area including the Mediterranean, the Red Sea, and the Persian Gulf. We will maintain a permanent but rotational Marine amphibious ready group in the Mediterranean.

In the wake of the recent conflict in Kuwait and Iraq, we may retain a presence in the Middle East in the near term to ensure stability in the region, to provide for the orderly redeployment of our equipment and munitions and to assist in the restoration of the Kuwaiti infrastructure.

In the longer term, however, we will keep a continuous naval presence likely in the Gulf and in the North Arabian Sea and we expect that there will be an opportunity to exercise ground and air forces there regularly.

We are currently working with the CINC and our friends in the Gulf to define the details of that presence.

Turning to the Pacific—

The CHAIRMAN. Before you leave that subject, could you run through some of the numbers there just a second, Admiral. It is hard to read the chart.

In Europe and in CONUS, the Army has got two divisions, is that right?

Admiral JEREMIAH. Yes, sir.

The CHAIRMAN. What is it in CONUS that is connected with this?

Admiral JEREMIAH. The six reserve and two cadre divisions.

The CHAIRMAN. Four active, six in reserve, and two cadres. OK. Thank you.

Admiral JEREMIAH. In the Navy you have in Europe a carrier battle group presence and we may have in addition to that in the near term forces in the Persian Gulf, Red Sea and they would flow out of a five-carrier battle group in the Atlantic Command on a rotation basis.

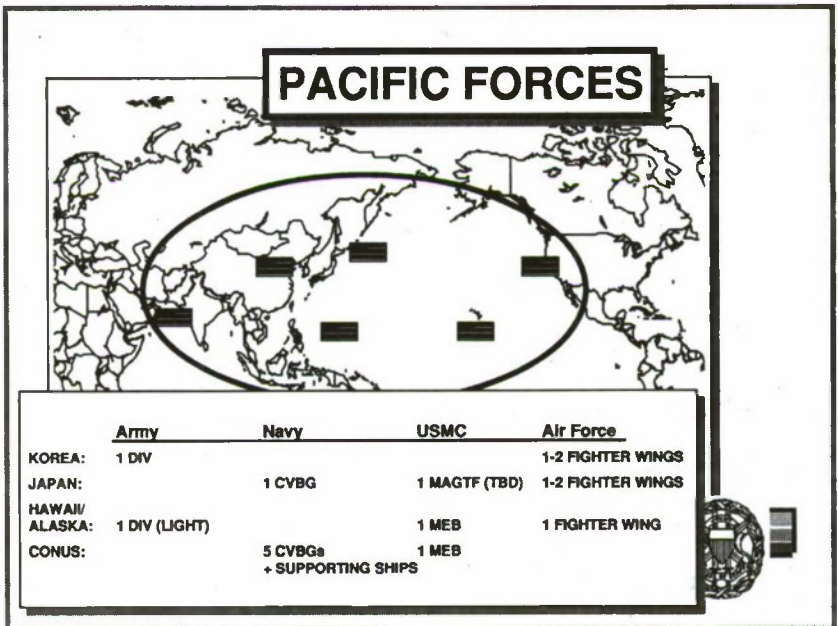
The CHAIRMAN. Thank you.

Admiral JEREMIAH. I would like to turn now to the Pacific, a region of growing importance for the United States.

The nations of the Pacific rim have dynamic economies. Our commercial, political and military ties to this region are increasingly vital to us. Today our two-way trade with the Pacific rim is greater than our trade with Europe.

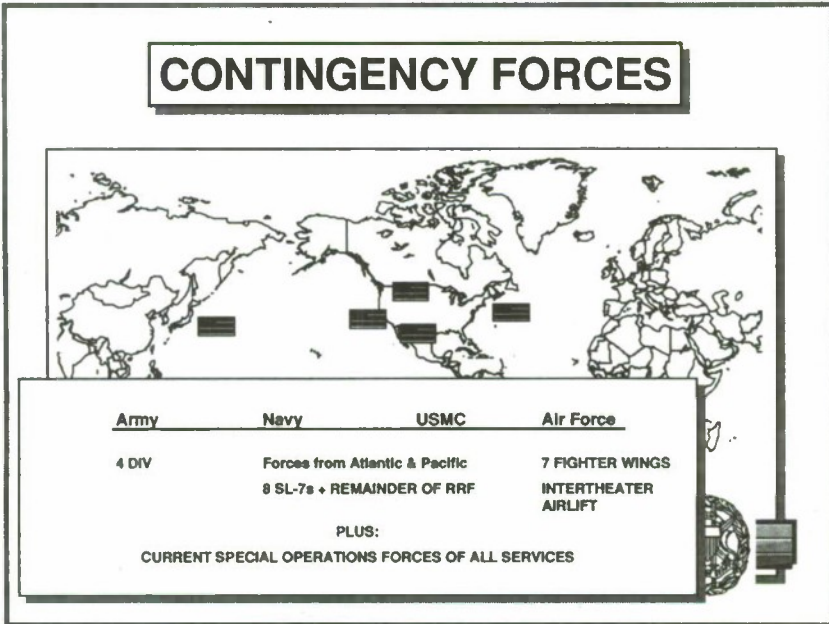
Since World War II the United States has fought two wars, in Korea and Vietnam, in the Far East against regional troublemakers. We cannot ignore the fact that today the world's seven largest armies, now that Iraq has recently dropped from the list, operate in this region. Furthermore, nearly every nation in the region holds some kind of geographical, ethnic, religious or political complaint against one or more of its neighbors. Our Pacific forces continue to deter would-be aggressors in the region and demonstrate our commitment to our allies. But our presence there is beneficial to the entire region and not just to our military allies. America's military presence guarantees a stable security environment in the Pacific allowing economic and commercial development to flourish.

Our Pacific forces also remind everyone that the United States is indeed a Pacific power and that we remain vitally interested in the destiny of that region.



This chart reflects the fact that the Pacific is primarily a maritime theater. Six carrier battle groups, half of our projected carrier force, will operate in this region as will three Marine expeditionary brigades.

Our Army forces in this area will be trimmed to two divisions. After consultation with our allies, our Air Forces will deploy fighter wings in the region as shown.



Finally we have provided contingency forces for dealing with local crises which are limited in time, scope, and space. Generally those shorter dots you saw on the first chart, in the shorter, finer line.

For those kinds of contingencies, we need light, hard-hitting, deployable forces kept at a high state of readiness. Depending on the circumstances, forward-deployed forces in the Atlantic and the Pacific, such as carriers and Marine air-ground task forces, would be augmented by Army forces configured for the contingency task. Those forces are built around the 18th Airborne Corps comprising four divisions of heavy, airborne, air assault and light infantry troops.

Navy and Air Forces would configure necessary additional expeditionary supporting packages to reinforce, if required, and tailored to the task out of the Atlantic and Pacific forces.

Each of the services contribute special operation forces with unique capabilities to the contingency forces, including special-operations-capable elements afloat with each Marine expeditionary unit.

Mr. Chairman, in addition to these force packages, General Powell also outlined to this committee four supporting capabilities we need in the future. I would like to touch on those briefly as well.

The first essential supporting capability is our transportation capability. Strategic mobility, as I think I've pointed out throughout this testimony, is crucial to the success of each of our force packages. The Atlantic force needs air and sealift to deploy and reinforce elements in trouble spots far away from our forward bases in Europe or CONUS and to keep those forces supplied. A similar requirement exists in the Pacific which spans more than half the globe. Our ground contingency forces are based in the United States and need rapid deployment to move them to crisis areas.

To meet that requirement, we need the C-17 to replace the capability lost as the C-141 is retired. For sealift, this means a modest increase in the size of the Ready Reserve Fleet to the point where we can deploy a heavy Army corps in a single sailing and then to sustain that corps, plus the Marine and Air Forces that may be associated with it, in our most stressful contingency scenario.

We also need to be able to deploy three squadrons of Marine maritime pre-positioned ships which give us the rough equivalent of a Marine division's worth of equipment uploaded and forward deployed but configured so that smaller task-organized elements can also be pulled out of it and employed as a special MAGTF tailored to a particular mission. We need pre-positioned material and standby installations in Europe and in Southwest Asia.

The second essential supporting capability is our space capability. Communications, reconnaissance, and navigation activities performed by space systems and are now essential to the success of virtually every U.S. military operation, including the viability of our strategic deterrent. That capability will be more important in the future to support surveillance and operations as we reshape our overseas bases and access agreements.

Our program for space forces will modernize our current systems, increasing the capacity of our space platforms to support commanders and forces in the field.

Reconstitution is the third supporting capability we need. Reconstitution consists of three elements: industrial production, mobilization planning, and force regeneration. We have given detailed consideration to each of these elements in our planning, and I would be first to confess that that is a tough nut to crack and we have some significant work to do in the area.

Based on my experience in the last year in the deliberations of the Defense Acquisition Board and in the Joint Requirements Oversight Council, the element of greatest concern to me among those three is our industrial capacity. In order for us to produce the weapons and systems we need in the future, even in limited numbers, we have to have a robust research and development capability. I will talk more about that in a minute.

But we also need to take what R&D gives us and turn it into usable production. In order to get production, you have to have producers.

Suppliers of Selected Military Items

Product / Item	Number of Suppliers	Product / Item	Number of Suppliers
Airborne radars	2	Titanium sheeting	3
Aircraft engines	2	Titanium wing skins	2
Aircraft landing gear	3	Titanium extrusions	1
Aircraft navigation systems	2	Optic coatings	1
Infrared systems	2	Needle bearings	2
RPV/Missile/Drone engines	2	MILSPEC -	
Gun mounts	2	qualified connectors	3
Doppler navigation systems	2	Radomes	2
Aluminum tubing	2	Image converter tubes	1
		Specialty lenses	2



This chart shows the number of sub-tier suppliers of many military items critical to our major weapons systems is dwindling drastically. I think that as we experience declining defense budgets over the coming years that problem will grow worse with further attrition not only among the sub-tier suppliers but perhaps even among major defense contractors as well.

In the future, the number of major contractors for shipbuilding, nuclear power propulsion units, and combat vehicles may shrink to unacceptably low levels. Across the board, we can expect the competitive pressures from an economically united Europe and the dynamic nations of the Pacific rim will continue to take their toll.

Right now we need to urgently get on with strategic material production at facilities such as Rocky Flats and Savannah River while looking toward the long-term reconfiguration of DOE facilities supporting the Department of Defense.

The final supporting capability we need is a healthy research and development base. Product improvement, modernization and innovation all flow from R&D. The recent war in the Persian Gulf vividly demonstrated to everyone how investments in high technology can pay enormous dividends in the furnace of battle. Our past research and development programs served us well during that war. But hereto there are clouds on the horizon.

We have come to take American technological superiority for granted. That is clearly not the case in the future.

Relative Standings in Emerging Technologies

TECHNOLOGY	R & D	PRODUCT INTRODUCTION
	(Current / Future)	(Current / Future)
Advanced materials	Even /Losing	Behind/Losing
Advanced semiconductor devices	Even/Holding	Behind/Losing
Artificial intelligence	Ahead/Holding	Ahead/Holding
Biotechnology	Ahead/Losing	Ahead/Losing
Digital imaging technology	Even/Losing	Behind/Losing
Computer-integrated manufacturing	Ahead/Holding	Even/Holding
High-density storage	Even/Holding	Behind/Losing
High-performance computing	Ahead/Holding	Ahead/Losing
Opto-electronics	Even/Holding	Behind/Losing
Sensor technology	Ahead/Losing	Even/Holding
Superconductors	Even/Losing	Even/Losing



As this chart shows, our lead in many critical future-looking technologies is already eroding. We cannot take R&D for granted and we should not overlook the positive commercial spinoffs that often accompany our investments in defense technologies.

Private sector investment in science and technology has quadrupled in this country since 1960. But that has not offset the sharp decline in the DOD R&D funding. In total, our Nation's investment in R&D steadily declines. As a Nation, we have not been able to protect the technological lead we once held in so many fields with harmful consequences to our commercial economy as well as to our future defense requirements and our ability to translate that into production on a competitive basis around the world.

In conclusion, Mr. Chairman, our proposed force packages and support forces have been structured in full consideration of our strategy and our assessment of future events. In that regard, the reduced force levels we are proposing will be reached in an orderly manner while giving us the flexibility to reevaluate our decisions and fine tune the force as may be required by changing events.

I think it is worth bearing in mind that we construe this as a minimum force structure in this Base Force. Second, I think I want to caveat that and point out that evolving events in the Middle East may affect the timing of some of our reductions particularly as they affect the men and women who have served so well and faithfully for us in the Middle East.

We program for smaller forces based on reduced requirements and a corresponding reduction in defense resources. But we must be careful that force reductions do not gain their own momentum independent from either world events or our national strategy.

FORCE STRUCTURE

	<u>FY 1990</u>	<u>FY 1995</u>
Army Divisions	28(18 active)	18 (12 active)
Aircraft Carriers	13	12
Carrier Air Wings	15(13 active)	13 (11 active)
Battle Force Ships	545	451
Tactical Fighter Wings	36(24 active)	26 (15 active)
Strategic Bombers	268	181



This is a wrap-up chart that shows you the totality of the force structure among the pieces that were put together among the separate sides.

Mr. Chairman, thank you for your attention and the attention of the committee. That is the end of my statement, sir.

PREPARED STATEMENT OF ADM. DAVID E. JEREMIAH

Mr. Chairman, last month Secretary Cheney and General Powell spoke to this committee and outlined for you the major elements of our national security strategy. Secretary Cheney gave an overview of some of the strategic assumptions that underlie our planning. General Powell sketched out emerging and enduring strategic realities at home and abroad, and also explained the force packages and supporting capabilities we need to meet our future defense needs.

The end of the Cold War is clearly the most dramatic change to have altered the international strategic environment. The change has two important components for us. The first is our changed relationship with the Soviet Union. In years past, we took it for granted that we were locked in an adversarial relationship with the Soviets, and planned our national security programs accordingly. This is now changed. Secretary Cheney pointed out, however, the concerns we have over recent events in the Soviet Union that seem to be contrary to their earlier moves toward democratization and demilitarization.

The second important component of change caused by the end of the Cold War concerns the altered geopolitical situation in Europe. However the current tensions within the USSR work themselves out, the fact remains that Europe is no longer divided into two camps separated by an Iron Curtain. The Warsaw Pact is a thing of the past, and Soviet hegemony in Eastern and Central Europe cannot be revived even if reactionaries within the Soviet Union gain the upper hand.

But the end of the Cold War has not brought with it a wholesale end to international conflicts, or even to threats to our national interests. The war in the Middle East to liberate Kuwait is only the most obvious example of this. We have had several other occasions within the past 18 months in which we have used our military forces to fulfill both combat and noncombat missions. Even with the end of the Cold War, the world remains full of dangers, uncertainties and potential challenges to our interests.

Key Elements of US Strategy

Given the rapidly changing world situation and the uncertainties of the future, the Department of Defense has developed a strategy to achieve our national security objectives. President Bush has specified those objectives as national survival; a healthy economy; a stable and secure world; and healthy, cooperative and politically vigorous relations with our allies and friendly nations. Implicit in a healthy, growing economy is an obligation for us to operate within the fiscal guidelines of the budget agreement between Congress and the President.

That strategy, and a comprehensive assessment of our planned forces, are contained in the 1991 Joint Military Net Assessment recently approved by the Secretary of Defense for provision to Congress in accordance with the National Defense Authorization Act of 1989. Quoting from the JMNA:

"US military strategy is founded on the premise that America will continue to serve a unique leadership responsibility for preserving global peace and stability. It is derived from US defense strategy, which formerly focused primarily on containing Soviet aggression on a global scale. This defense strategy is now shifting to added focus on forward presence, crisis response, and reconstitution as its major themes, while maintaining our long-term reliance on nuclear deterrence. Because of changes in defense strategy, priorities and emphasis among the various principles that describe the national military strategy have begun to shift significantly. This shift represents an essential adaptation to the new realities already described - a receding Soviet threat and a declining defense budget."

Central Military Strategic Concepts

The Department has linked these elements of defense strategy to our forces through fundamental military strategic concepts which have guided this nation since the beginning of the nuclear age and which, in testimony to their resilience, remain valid today:

Deterrence. The requirements of robust and stable nuclear deterrence will continue to define the composition of our strategic offensive forces. Likewise, global capability to deter conventional aggression influences the size and characteristics of US forces, the location and magnitude of forward deployments, and the tempo of forward presence. The false economy of withdrawal from regional responsibility belongs to an earlier age. Isolation is a costly error.

Power Projection. The Desert Shield mobilization convincingly demonstrated the military value of power projection capability. No other nation on earth possesses this capability. The sealift and airlift mobility programs, which enable projection of land and air forces, are truly national assets that must be preserved and modernized at or above current levels of capability.

Forward Presence. American forces contributed to the winning of the Cold War in part by remaining engaged in Europe for over 40 years; making clear to potential adversaries the extent of American interests. We stayed in Europe even when economic times were lean at home and when we were engaged in a major conflict in Southeast Asia. Forward presence can include, but is not limited to, stationed forces, rotational deployments, access and storage agreements, combined

exercises, security and humanitarian assistance, port visits, and military-to-military relations. Now that the immediate military threat to Western Europe is fading, the time has come to refocus the emphasis of our forward presence. However, certain forward basing, force deployments, and materiel pre-positioning must also be done to support power projection.

Reconstitution. This concept signals that the nation is prepared to field whatever forces are required to protect our vital interests. Reconstitution capability begins with an industrial base that is capable of responding to demand for munitions, weapon systems, and supporting materiel to provide sustainment for major combat operations. It also includes detailed and accurate plans for mobilization in response to strategic warning. Finally, it includes the ability to regenerate forces, primarily through activation of reserve units.

Collective Security. Collective security is the concept that acknowledges our enduring commitment to those alliances and bilateral relationships that have served this nation so well in the past. Reductions in forward presence and lower defense budgets will increase our reliance on collective security arrangements.

Maritime and Aerospace Superiority. Control of sea, air, and space lines of communication is essential to our capability to protect our global interests and to project power, reinforce and resupply forces, and gain access. Maritime and aerospace superiority stem from the synergism of a variety of factors, including advanced technology, a robust force structure, and high states of readiness.

Security Assistance. When we nurture the capability of other nations to protect their own national security interests, we are effectively lessening the potential for greater burdens on our own forces and furthering the cause of regional security cooperation. Thus, security assistance continues to receive emphasis even as our own force structure declines.

Arms Control. Arms control has succeeded in limiting the scope of strategic arsenals, removing an entire class of weapons from the battlefield, and providing a framework for reduction in the level of confrontation in Europe. Not an end in itself, arms control serves our interests by reducing military threats, increasing the predictability of military relationships, and increasing the stability of force modernization.

Technological Superiority. Technological superiority is a hallmark of American forces. We cannot surrender the technological leadership that

has consistently put the best weapon systems in the field and backed them up with supporting systems to match. We have used the term "force multiplier" so often that it has lost its impact in conversation; fortunately, it has not lost its impact in conflict.

Other Military Tasks

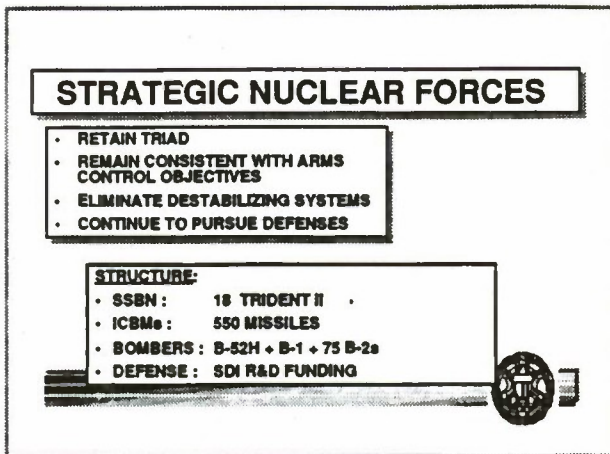
In addition to these central strategic military concepts, two other specified military tasks required our consideration. First, we have been directed by the President and the Secretary of Defense to assist in the war on international drug trafficking. Second, we seek to deter and defend ourselves against international terrorism. Both of these tasks require appropriate forces and resources, and neither can be neglected as we consider the future structuring of our forces.

Flexibility and Risk

These central strategic concepts and tasks provide the link between our strategy and our force structure. In the past, adherence to these broad concepts have yielded a diverse force with enormous flexibility. In the future, it may well be that a reduced force structure will limit our flexibility somewhat. A reduction in overall military flexibility carries with it the possibility of increased risk under certain circumstances. In consideration of this, we have tried to configure our future forces in a way that minimizes risk and maximizes flexibility within our given constraints.

Military Force Packages

The four force packages and four supporting capabilities discussed below apply the new strategy concepts to our military force structure. This is the structure we have proposed in the Future Years Defense Program.



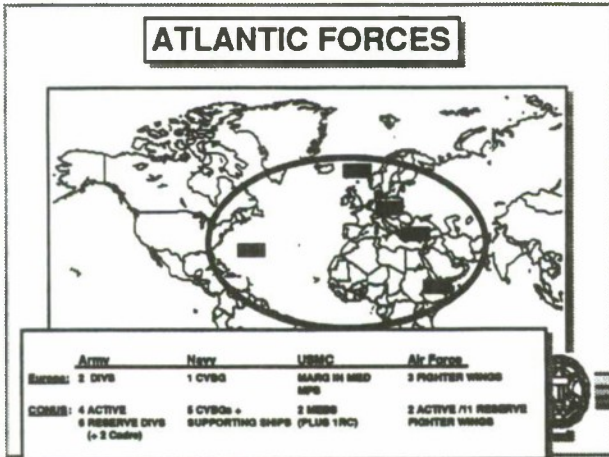
Strategic Forces

Our planned strategic offensive force retains the triad of submarines, ground-based ballistic missiles and manned bombers in recognition of the strengths of each leg and their value to our overall nuclear strategy. Our planned strategic force structure anticipates continued progress in arms control while ensuring necessary force modernization. The 18 remaining SSBNs in the force are all Trident class submarines equipped with a mix of C-4 and D-5 missiles. At a total of 181 by 1995, the bomber leg reflects the contributions of the B-1 fleet, and retention of sufficient B-52s to ensure a credible bomber force during introduction of the B-2.

The greatest potential for change lies in the structure of our land-based missile forces. Arms control may yet succeed in removing destabilizing silo-based missiles with multiple warheads. If so, this will promote single-warhead missiles in silos or missiles in mobile basing modes. To protect our future options, we have chosen to continue research and development in both the rail garrison deployment mode of the PEACEKEEPER missile and the Small ICBM while deferring deployment of either. At the same time, we plan to reduce our ICBM force by retiring Minuteman II in expectation of mutual and effective verifiable force reductions.

We also remain committed to the development of strategic defensive forces. We need to have the ability to deter an attack on the United States and to defend against an attack if deterrence fails. The SDI program,

although restructured, remains consistent with the Phase I objectives established by the Joint Chiefs. Given the proliferation of missile technology and the possible proliferation of unconventional warheads in future years, investments in defenses against limited strikes and in-theater ballistic missile defenses are complementary and prudent.



Atlantic Forces

Atlantic forces form the backbone of conventional deterrence from the eastern shores of the United States through the Persian Gulf. These are the forces that maintain our peacetime engagement in Europe, the Middle East, the Mediterranean, and Southwest Asia. They will also be the bedrock of our reconstitution capability should we receive warning of a Soviet return to a posture of direct military confrontation with the West. Although we are reviewing our forward presence in the Atlantic region with our allies and, hence, no final decision has been made. I expect the active component of the Atlantic forces will eventually include a forward presence in Europe of a heavy Army corps with at least two divisions; a full-time Navy and Marine presence in the Mediterranean; and Air Force fighter wings possessing the full spectrum of tactical capability. We are in the process of working with our NATO partners to refine the composition, location, and future command relationships of these forces. As we shift from an atmosphere of tension

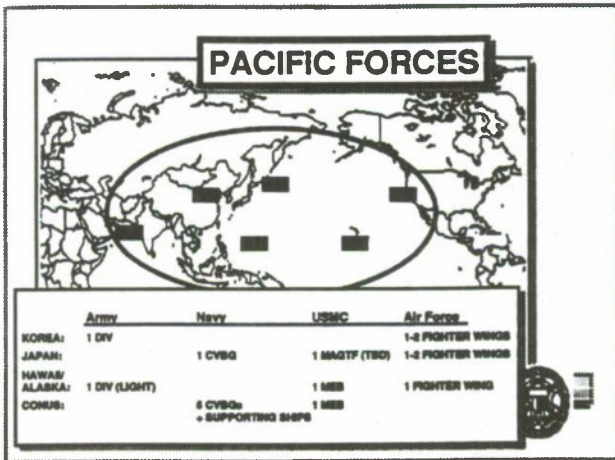
and confrontation to one of prudent watchfulness and engagement, multinational formations may well become the command arrangement of choice, particularly for ground forces.

In the wake of the recent conflict in Kuwait and Iraq, we may retain a modest future presence in the Middle East in the near term to ensure stability in the region, to provide for the orderly redeployment of our equipment and munitions, and to assist the restoration of Kuwait's infrastructure. In the longer term, we will keep a continuous naval presence in the Gulf, and we expect to exercise ground and air forces there regularly. We are currently working with the CINC and our friends in the Gulf to define the details of that presence.

The forward-deployed elements of Atlantic forces, and their active component reinforcements in CONUS, also provide a potent crisis response capability to protect American interests and project force in the region. While the number of full-time forward deployments will decline, Atlantic forces will maintain access and influence throughout the region by means of port visits, joint and combined exercises, and periodic short-term redeployments of selected units.

The bulk of the Reserve Components of the Services have been allocated to Atlantic forces. This reflects their essential role in demonstrating America's continuing commitment to the security of the region. However, we will continue to call upon our reserves to perform combat and combat support missions in crisis response and contingency operations in other areas as needed. While the degree of readiness may vary among specific units, we remain fully committed to the Total Force concept, as reflected by our intention to continue the modernization of reserve forces.

When viewed in total, our Atlantic forces are structured to protect American political and economic interests in the region from our eastern shore to the Persian Gulf.

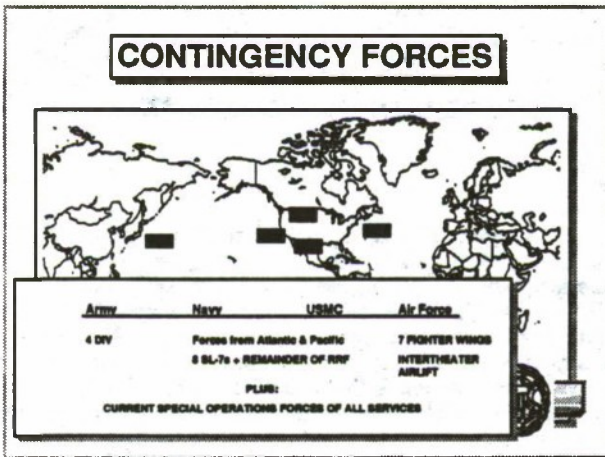


Pacific Forces

The Pacific is a region of growing importance to the United States. Several nations of northeast Asia and the Pacific Rim have dynamic economies, and our commercial, political and military ties to this region are vital to us. Since World War II, the United States has fought two wars -- Korea and Vietnam -- in the Far East against regional troublemakers. We cannot ignore the fact that today the seven largest armies in the world operate in this region. Furthermore, nearly every nation in the region holds some kind of geographical, ethnic, religious or political complaint against one or more of its neighbors. Our Pacific forces continue to deter would-be aggressors in the region, and demonstrate our commitment to our allies. But our presence there is beneficial to the entire region and not just to our military allies. America's military presence guarantees a stable security environment in the Pacific, allowing economic and commercial development to flourish. When I was Commander-in-Chief, Pacific Fleet, I saw firsthand how our forward presence gives us both access and political influence in the region. Our Pacific forces remind everyone that the United States is itself a Pacific power, and that we remain vitally interested in the destiny of that region. Thus, in cooperation with our Japanese allies, we plan to maintain a combat air, naval, and Marine presence in Japan throughout the 1990s, but at reduced numbers. As South Korea continues to

gain confidence in its own military capabilities, we expect to be able to reduce our own ground presence, but to retain smaller deployed light and heavy forces. Air Force deployments to Korea will also be reduced, but we will remain fully engaged on the peninsula, lest the door be opened to adventurism by the North Koreans. We expect to remain engaged in Southeast Asia through a program of frequent exercises, short term force deployments and visits by units stationed in the United States. The Defense Program provides for a capability of maintaining one CVBG continuously (operating from Japan) and one ARG and MEU (SOC) for most of each year in the western Pacific. Reflecting their geographic orientation, Reserve Component forces in Alaska and Hawaii are allocated to Pacific forces.

Several of our alliance partners in the region have gained the economic capability to share more fully in the costs of maintaining mutually advantageous American military presence. Accordingly, we expect that our infrastructure costs in the region will continue to decline even as we retain significant forward presence.



Contingency Forces

Contingency forces provide global crisis and contingency response capability across the spectrum of conflict from counterinsurgency to major conventional conflict. Because the emphasis in contingency response is on

timeliness, the forces are versatile, primarily light, and drawn from the Active Components. Each Service brings unique capabilities to contingency forces. The Army contributes airborne, air assault, light infantry, and supporting forces. The Air Force brings the entire range of tactical forces, plus conventional strategic bombers, command and control aircraft, intelligence platforms, and so forth. Carrier-based naval air power is an essential ingredient of contingency forces, as is the amphibious combat power of the Marine Corps. Many likely contingency scenarios vary from our recent experience in Desert Storm, where numerous bases and an extensive logistics infrastructure were available ashore. Frequently, access ashore will be contested or unobtainable, requiring employment of sea-based forces. The Special Operations Forces of all Services are also a major ingredient of the contingency forces. These forces, due to their unique capabilities, constitute a special resource, one which has been revitalized over the past decade. It is an investment which we must protect, even as we reduce our General Purpose forces.

The forces deployed from the United States during Desert Shield/Storm provide an accurate gauge of current thinking regarding appropriate sizing of contingency forces. Recall, however, that the total force drew upon not just US-based forces, but forces from the Atlantic, Pacific, and Europe as well. Through in-depth reviews of the operation, we will now refine that estimate to configure our future contingency forces.

Basic Military Supporting Capabilities

Potent though these four force packages may be, they are highly dependent upon, and incomplete without, the four supporting elements of our force structure.

Transportation capability comes to the fore in every contingency as it delivers combat power to the region and sustain that power through the contingency and redeployment. No other country possesses such a comprehensive combination of airlift, sealift, and pre-positioned resources. We must ensure that this national resource remains intact through the years immediately ahead as our forces are restructured. For airlift, that means continuation of the C-17 program to replace the capability lost as the C-141 Starlifter fleet is retired. For sealift, that means a modest increase in the size of the Ready Reserve Fleet to achieve the capability of deploying a heavy Army corps in a single sailing, then sustaining that corps -- plus the Marine and Air Force forces associated with our most stressful contingency scenario. For pre-positioning, that means deploying three squadrons of Marine maritime pre-positioning ships, and pre-positioned materiel plus standby installations in both Europe and Southwest Asia.

This is a potent power projection capability, one which would seem incongruous with the overall direction of our force structure were it not for our ongoing experience in the Gulf. As surely as the heat rises in the desert, there are other "Desert Storms" over the horizon. It is only through the maintenance of our transportation capability that we will be able to project power with such confidence.

Over the past twenty years, space capability has assumed integral, though nearly invisible, roles in the functioning of both our strategic and our general purpose combat forces. In the future, space technologies will impact more than any other area the accomplishment of the military mission. Space will be the key to deterrence and in a global war will likely be a battlefield. An integrated system of satellites will provide a significant portion of the national command and control infrastructure. Communications, intelligence, and navigation functions performed by space systems are now central to the success of virtually every US military operation, including the viability of our strategic deterrent. Our program for space forces includes efforts to further institutionalize and modernize current capabilities and initiatives to increase the degree to which space systems support commanders and forces in the field. We will complete deployment of several highly capable satellite constellations during this period, including the Global Positioning System. In addition, with the assistance of NASA and the President's Space Council, we will pursue the development of advanced launch systems to achieve greater reliability by modernizing our fleet of boosters and our aging space launch infrastructure.

The Chairman often refers to our military forces as the "national insurance policy." Continuing that analogy, reconstitution capability can be thought of as our "catastrophic illness" rider. That is, as we reduce our forces in response to a new strategy for a changing world environment, prudence cautions against foreclosing options available to us to provide for regeneration of our force structure should such an eventuality become necessary. Reconstitution capability has three sub-components: Industrial capability, mobilization capability, and force regeneration capability. Our plans for the research and development portion of industrial capability, not just as an element of reconstitution, but as a key supporting capability in its own right, are discussed below. I am particularly concerned over the effect future force reductions will have on production capacity. Because of commercial demands, the missile, electronics, and aircraft industries, while reduced in size, will continue to maintain a supply base and production capability. However, the number of major contractors for shipbuilding, nuclear power propulsion units, and combat vehicles may shrink to unacceptably low levels. This problem extends to subtler suppliers as well. The loss of these manufacturers of subsystem components of larger systems is a threat to our ability to field state-of-the-art weapon systems on a timely basis. Examples of the low numbers of firms supplying selected items are shown in the following table extracted from the 1991 JMNA.

Suppliers of Selected Military Items			
Product / Item	Number of Suppliers	Product / Item	Number of Suppliers
Airborne radars	2	Titanium sheeting	3
Aircraft engines	2	Titanium wing skins	2
Aircraft landing gear	3	Titanium extrusions	1
Aircraft navigation systems	2	Optic coatings	1
Infrared systems	2	Needle bearings	2
RPV/Missile/Drone engines	2	MILSPEC -	
Gun mounts	2	qualified connectors	3
Doppler navigation systems	2	Redomes	2
Aluminum tubing	2	Image converter tubes	1
		Specialty lenses	2

Mobilization capability involves support for both the transportation infrastructure and for maintenance of the Selective Service system. The regenerated force structure will be grown from our two Army cadre divisions. These units would be capable of restoration to combat ready status in 12 to 18 months in support of a nationwide response to a return to the Cold War posture of conventional confrontation or similar national emergency. This is new ground, and an element of the force structure that is receiving considerable attention from the Department and the Services. However, the concept appears to make the most of our prior investment in equipment as well as respond to the requirement to maintain capability while reducing the force.

Research and development capability is the final but critical supporting element of our force structure. Product improvement, modernization, and innovation all stem from R&D and put the best available weapons and supporting systems in the hands of American forces. Returning once again to our experience in the Gulf, we have convincingly demonstrated that our long-term strategy of substituting high technology for quantity has been correct and resulted in swift military success while limiting American casualties. However, as the following chart demonstrates, there is reason for concern regarding the vitality and responsiveness of the resource base and ability to compete with foreign countries.

Relative Standings In Emerging Technologies		
TECHNOLOGY	R & D	PRODUCT INTRODUCTION
	(Current / Future)	(Current / Future)
Advanced materials	Even/Losing	Behind/Losing
Advanced semiconductor devices	Even/Holding	Behind/Losing
Artificial intelligence	Ahead/Holding	Ahead/Holding
Biotechnology	Ahead/Losing	Ahead/Losing
Digital imaging technology	Even/Losing	Behind/Losing
Computer-integrated manufacturing	Ahead/Holding	Even/Holding
High-density storage	Even/Holding	Behind/Losing
High-performance computing	Ahead/Holding	Ahead/Losing
Opto-electronics	Even/Holding	Behind/Losing
Sensor technology	Ahead/Losing	Even/Holding
Superconductors	Even/Losing	Even/Losing

America's lead in the laboratory, while far from secure, is at least unquestioned in a host of critical technologies. More troublesome is our failure to retain a position of leadership in developing those technologies which translate the fruits of research to usable end products. This is a national problem beyond the capability of defense industry alone to rectify. But we must all do our share to make the investments necessary to climb back on top in the area of industrial productivity.

FORCE STRUCTURE

	FY 1990	FY 1995
Army Divisions	28(18 active)	18 (12 active)
Aircraft Carriers	13	12
Carrier Air Wings	15(13 active)	13 (11 active)
Battle Force Ships	545	451
Tactical Fighter Wings	36(24 active)	26 (15 active)
Strategic Bombers	268	181



Testing and Resourcing the Force

Bringing these force packages together reveals the breadth and depth of the pending changes to our force structure. During the internal debate, which fashioned this force structure, each Service's contribution was tested at the margin to ensure adequacy in the most stressful scenarios in our strategy. The 1991 JMNA is a comprehensive assessment of the force prepared in coordination and consultation with the Military Service Chiefs of Staff, the commanders of the unified and specified commands, the US Coast Guard, the Intelligence Community and the Joint Staff. When constructing the force, we took special care to protect unique capabilities such as Special Operations, rescue, and amphibious forces as well as missions such as counterdrug operations and disaster relief. Last summer's program review and the fall budget review ensured that forces matched our strategy and investment programs matched our forces.

Summary

Our proposed force packages and supporting forces have been structured in full consideration of our strategy and our assessment of future events. In this regard, the reduced force levels we are proposing are reached in an

orderly manner, which provides us with the flexibility to re-evaluate our decisions and fine tune the force in response to change and emerging world events. Although we have programmed for smaller forces based upon reduced requirements and a corresponding reduction in defense resources, we must be careful to ensure that our defense program does not become a self-fulfilling prophecy in which force reductions continue in isolation from world events.

The CHAIRMAN. Thank you, Admiral and Mr. Secretary. I appreciate your testimony. It was very, very interesting and I would like to ask a few questions and then pass it on to my colleagues.

The first question is to what extent was this change in the light of the Desert Storm experience? I know that the President revealed the basic outline of this, as you pointed out, on the exact date of the Iraq invasion of Kuwait in the President's speech in Aspen, Colorado; it was the first public presentation of the concept. But, of course, he did not go into detail in that speech.

In what way has this changed in the light of Desert Storm and if it has not changed, how come it has not changed?

Admiral JEREMIAH. As you are aware, Mr. Chairman, we have submitted this budget almost coincident with the developments that were going on in the Middle East.

The CHAIRMAN. Pull the microphone a little closer, could you, Admiral?

Admiral JEREMIAH. As you are aware, this was formulated during the period of time that events were going on in the Middle East. The supplemental request that has come forward reflects some of the things that are required. I think it is probably too early to say that this presentation of force structure represents any significant input of the lessons learned from the Middle East. We are working very hard on that process in recovering the data from the forces out in the field with the theater commander. Secretary Cheney is very intent on being able to come forward as early as he can with changes that may reflect the Operation Desert Storm lessons learned.

I think there are a number of lessons learned out of that, the first and foremost one of which, we would hope, is that any future aspirants for territorial expansion will learn well the lesson in that particular exercise. That the nations of the world will not tolerate that and therefore the requirement for force structure to deal with someone like that will be lessened potentially.

That is a pretty optimistic and idealistic world.

I think the second thing you can probably assume as a lesson learned is that both sides take lessons and many of the things that we were able to do here, a future adversary would work very hard to try to minimize. Particularly the access to host nation support, the port facilities and things that were available to us and the time lines that we were able to drive.

The CHAIRMAN. So let me just see if I understand.

What you are saying is that this plan is essentially the same as it was before Desert Storm—

Admiral JEREMIAH. Through the summer program policy development and to the—

The CHAIRMAN. It may be changed in some ways in the future based upon Desert Storm, but you have not really come up with the final lists of—

Admiral JEREMIAH. Some of that will in fact not be useful to us until next year's budget and beyond.

The CHAIRMAN. So we are waiting for the Desert Storm lessons to be totally analyzed and incorporated before we incorporate—

Admiral JEREMIAH. But I would argue that you would not find substantive changes in here. The precision-guided munitions, for

instance, are clearly something of interest to us out of there. There are provisions for those in the current budget. The utility of some of the systems that we have used I think have been clearly demonstrated and there are provisions for that in the budget.

So many of them will reinforce what is in here and reinforce some of the assumptions that are in here. Some of them will in fact suggest that we may want to make some slight changes to them. But I would have to leave that to Secretary Cheney after he has had an opportunity to review the program.

Mr. LIBBY. Mr. Chairman.

The CHAIRMAN. Yes.

Mr. LIBBY. If I might add just a word on it.

In the fall of 1989, as the dramatic events in Eastern Europe unfolded, the Department took a look at regional threats and the Soviet threat widely. Traditionally, for some time the Department had been looking at the threat in Southwest Asia primarily in the terms of a Soviet threat into Iran. A number of reasons made that seem unlikely: withdrawal from Eastern Europe, the experience in Afghanistan, their own problems in the Caucasus and their internal focus.

This led the Department, in the fall of 1989, to promulgate a new directive which was to focus planning on the defense of the Arabian Peninsula against regional threats like Iraq, and that was promulgated and discussed with your committee staff in the early winter of 1990. So that while no one is fully prescient, there was a long lead time in developing this force and looking at the very threat that we felt we met in Desert Storm.

Therefore, to some extent we had, to the extent that we could, put our own thinking into it in advance, anticipated some of the developments or the types of needs we would have to have for a Desert Storm-sort of activity. Needless to say, some lessons that we expected to come out of that will no doubt come out involving stealth, and lift and precision-guided munitions and a decade of investment in infrastructure, the value of all those force systems.

Mr. DELLUMS. Mr. Chairman, would you yield at that point?

The CHAIRMAN. Sure.

Mr. DELLUMS. Because I would like to raise a question with the gentleman that is appropriate to the question that you raised regarding lessons learned from Desert Storm. There seems to be one that is patently obvious that no one is addressing. At least I would like to assert it here and maybe get some juices flowing in a discussion about it.

I believe that against the backdrop of Desert Storm, we have learned that our extraordinary technological capability has thoroughly altered the battlefield having an enormous impact on the issue of force structure.

For example, and I will be very specific. In a yesterday war, maybe it took 150 men to assault a bunker. In the context of Desert Storm, you now realize that with smart bombs, cruise missiles, and stand-off capability, you could hit that same bunker with enormous capacity to kill—in fact, beyond most of our comprehension. So one does not have to be too bright a mathematician to realize the implications on force structure. You do not need the 150 persons.

Second example. By virtue of our technological advancements and with respect to our tanks, we have on the one hand improved dramatically our survivability and on the other hand increased our lethality. So it would seem to me that one can draw from this same example that you do not need as many tanks in a modern force because more tanks survived. Fewer tanks have the same capacity to destroy as a large number did in the past. One does not have to be a brilliant mathematician to know that if that is indeed the case—and I make that assertion that it is—if you need fewer tanks, you need fewer personnel. This which would again have enormous impact upon personnel.

Now, we went to war with a nation that we know was not our military equivalent. They could not match us smart bomb for smart bomb, cruise missile for cruise missile. So using our massive technological capability in Third World conflicts was extraordinary. We know that we have technology we did not even use in that situation that is even more than extraordinary than what we did use.

Therefore, the ground forces were really not a major factor, or certainly the mobilization of significant thousands of massive forces was an irrelevant, unnecessary, antiquated idea given our major spending in research and development which gave us this great technological capability.

One last point. If we go to war at some point in the future—and I hope that rational minds will prevail and we do not—and we go to war with a nation that can match us technology for technology. Again you have reconfigured the battlefield of the future to such an extraordinary level that it will be technology versus technology. Again, massive ground forces become perhaps an irrelevant concept.

So this force structure, as the Chairman pointed out, was designed on August the 2nd. But we now have experience with respect to Desert Storm which shows this massive technological capability. In your figuring about what the new force structure ought to be, it would seem to me that we have a profound obligation, indeed a responsibility, to figure in what impact our technological developments and the experience of utilizing them has on the number of our force structure. Now that we have tests upon which to judge that, it would seem to me to be patently obvious.

Would you respond to that please?

Mr. LIBBY. Shall I take first crack at it?

Admiral JEREMIAH. Go ahead.

Mr. DELLUMS. In this room we have the luxury of thinking and we have a responsibility to think. We have a responsibility to project into the future and we have a responsibility to build on the basis of rational knowledge, and we do have experience here now. I think our technology has rendered many of these concepts ineffective—they are history.

Mr. LIBBY. There is much that I would agree with in what you are saying, to make the point about how our improved accuracy has decreased the number of systems you need to do a given job. It is instructive to look at tables that report the number of bomber strikes and bombs needed to hit a target back in World War II compared to the number today. It is several orders of magnitude

difference to get down to hitting the same target with the same precision.

So there is no question that would be reflected in trying to derive a future force structure, and to a certain extent we thought about that. There are no doubt lessons from the battlefield in the Persian Gulf which will also adjust our thinking.

But I guess, as you expect, I would be a little more cautious in jumping to the conclusion from Operation Desert Storm that large ground forces were irrelevant.

They played an important role there, we believe. On the basis of one conflict, to use the phrase of Mark Twain, "You have to be careful that you only put into an experience as much knowledge as there is in it." We need to take a careful look at what the next and other criteria look like, what other situations will look like.

Mr. DELLUMS. I would like to follow up, but I do not want to dominate the time. I will follow up with you on my own.

The CHAIRMAN. Let me just follow up on the gentleman's question. The question is, in the light of the Desert Storm experience, is there an argument that with a more capable technological force, you can therefore do with less forces. That is the core of the argument regardless of what service is—

Admiral JEREMIAH. Let me take a crack at that, if I may?

The CHAIRMAN. Please.

Admiral JEREMIAH. Technology counts. No question about it. We have been saying that for decades. What we are trying to do here is to use our technology to improve the force—as a force multiplier, to improve the quality of our force. We have always been numerically inferior to the major opponent that we anticipated on the battlefield. Even today, Secretary Libby indicated the Soviet Union is still in their declining forces a two or three-million man armed force as compared to our own. But we have counted on our technology to help us in dealing with that.

Now, the fact that what the world now sees is what most of us in this committee and in the military have known about the capability of our technology is indeed a factor in what is going on. But I think we pretty much knew what we could do with precision-guided munitions as a result of testimony and demonstrations of capability which you have all seen as you have walked around military installations around the world.

In fact, ground forces have indeed been reduced in this plan and in this force structure to precisely reflect the fact that we are dealing with a different environment. Not necessarily technological. But a different environment in the central front of Europe.

Whether we want to continue to drawdown soldiers on the ground, I think is a function of what you think you have to do with them. I would point out that the first thing we wanted to get into Operation Desert Storm were ground forces to assure the security of the land-based tac air bases on the ground and that was—if you had looked at some of the statements made by General Schwarzkopf—a fairly tenuous issue in the early days until we could get more forces on the ground.

One of the fundamental precepts of war since Sun-tzu is mass. The ability to mass forces makes all the difference in the world. Mass and mobility. In this case we massed precision-guided muni-

tions as well as ground forces against an enemy. In the future, we may not have the same freedom of action as we did in this case where after 36 air-to-air engagements in which the Iraqis lost, they quit in air-to-air. We will have a much more hotly contested engagement potentially in the future and the freedom to exercise some of that capability in delivering air-to-ground munitions may or may not be available to us.

Finally, I think I would argue that even as a simple sailor, the facts of the matter are when you get to the end of the line, somebody has got to knock on the door and say, "I hereby take possession of this territory in the name of the United States, United Nations, coalition forces," whatever the case may be.

So you are not going to walk away from the requirement to have the soldier on the ground. We were pretty sure that that nut was going to crack. We did not know where and we did not know how, but we knew that in order to crack it, you had to put mass against the other side and open it up and see where it was going to fall apart. It fell apart in a way that surprised many people I suspect, but only after an intensive campaign, a technological campaign, of the type you have alluded to.

The CHAIRMAN. Let me ask—oh, you were going to say something more?

Mr. LIBBY. Just a few quick comments, I'm sorry.

The Soviets have a saying that "Quantity has a quality all of its own." It is tempting to look at this last example and say that quality beats quantity. It might be more accurate to say "Quality in quantity beats quantity."

The CHAIRMAN. Let me ask this question, Admiral, or Mr. Secretary, either one.

Under this Base Force concept, could we repeat Desert Storm? Could we get 540,000 or our peak level in the region, with the distribution of Marines, Army, Air Force and Navy?

Admiral JEREMIAH. I think the answer to that is, as you have heard from a variety of witnesses so far, has been, "yes but/no but." Yes, in the sense that ultimately I think we could accomplish the objective. No, in the sense that we would do it in precisely the same way. First, I do not think we would have the opportunity to do it the same way. I think, as I indicated earlier, the circumstances would change. This force has the capability of doing it but with greater risk, not necessarily in that particular campaign, but in other areas and parts of the world.

As you drawdown the numbers of forces here, you are going to have fewer forces available in Europe, for instance, if we went through a direct carbon copy. You would have greater risk in our ability to reinforce in areas around the world such as Korea, or some other hot spot where we would have a requirement to do it. So there is—

The CHAIRMAN. But the technical question is could you get the 540,000, et cetera, with the distribution between the services? The answer to that question is yes?

Admiral JEREMIAH. I think the answer to that question is yes.

The CHAIRMAN. But there's a risk involved, of course. With fewer forces worldwide, you have to run down the force numbers in some other part of the world and that entails a certain amount of risk.

Admiral JEREMIAH. That entails risk and the timing and sequencing of forces would probably be different.

The CHAIRMAN. Let me ask this question then. How were the forces in this Base Force concept sized? I mean how did you decide that you needed 12 aircraft carriers? That you needed 26 wings? That you needed 12 divisions? What were the driving factors that caused you to size the force here under this exercise?

Admiral JEREMIAH. I think the Chairman addressed that in many ways in his testimony before the Armed Services Committee when we talked about the enduring realities that exist around the world. The changes in the Soviet Union that were important to us that I alluded to earlier. The degree to which we think that we can carry out what we all describe as a minimal force. This is the Base Force. We do not perceive that we can go below this force structure and carry out missions that have been assigned.

But given the rotation policies that we perceive, some flexibility in our forward presence and the changes that have taken place in Europe which impact predominantly on Army and Air Forces, we feel that these packages that we have described give us the ability to carry out our force strategic effective—

The CHAIRMAN. What is the scenario that you anticipate? Do you anticipate one contingency, two contingencies? In other words, if you are looking at a world like this—I mean ordinarily you try to have the old 2½ war strategy and then a one war. What kind of a strategy have you got built into this Base Force concept? Are you looking at being able to handle one contingency like the Persian Gulf? At the same time have enough force in the rest of the world to discourage people from trying to take advantage of it? Are you looking at a two-contingency force? Are you looking at being able to execute a Persian Gulf plus the Liberia rescue operation at the same time? Are you thinking in terms of handling a Korea and a Persian Gulf at the same? What are the kinds of things you are looking at here?

Admiral JEREMIAH. All of the above, as you point out, and as I tried to point out in our testimony, and when we are looking at scenarios, we are looking at threats. We look at all of those things.

We are not trying to size it to a specific 2½, 1½, 1.3 here, 1.4 there.

What we are trying to have is a force that allows this country to respond to requirements, and it is treated I think quite well in the JMNA in talking to the risk associated with different levels of contingency, the likelihood that those contingencies will occur, and the force structure that is required potentially to deal with it. There is a continuum of risk and of likelihood of occurrence in which we tried to posture a force that we felt would cover the most likely kinds of scenarios that we might see against the most likely kinds of threats we have without going so large in the force structure that we would not have the ability to sustain it at the levels of readiness or the modernization that is necessary to support it.

So the direct answer to your question is that we did not size it on X plus Y scenarios. We sized it on the continuum of scenarios that we expect and the size of force that you want to try to have do address all of that.

The CHAIRMAN. One more question and then let me yield. How does this translate or how does this track into the command structure? You now have got an Atlantic Command, a CENTCOM. How does this translate into the various operational commands that exist now?

Admiral JEREMIAH. We tried to sort out what we needed from an operational requirement. We look at—for instance, the Atlantic force is basically a heavy force. It has, in the Army context, tanks and things where that kind of warfare on the central front or in the desert is the most likely kind of warfare. So we scoped it to deal with the operational requirement. Not necessarily with the political requirements and the political military requirements that tend to drive theater command relationships.

The Chairman I think has addressed this and said that these are not intended to be directly translatable into force packages. We have tried to talk about them in lower case letters and we will look—the Chiefs and the Chairman at the command structure. We started to do that in July. Other events took place that occupied our attention in the interim. We will get back to that subject but we want to do it at the service chief, Chairman level, and understand what we want to do, if anything, to the unified command plans.

Clearly, in the face of the end-strength reductions, both in officers, general officers, and enlisted personnel who we face, we are going to want to look at the command structure and make it as economical as possible and still maintain the integrity of the original imperatives that created these regional commanders.

The CHAIRMAN. Charlie Bennett.

Mr. BENNETT. Well, first of all, I would like to say that as an amateur historian, it is not really a logical thing to think about having two wars occurring at the same time. If you look back in history when two wars were occurring, for instance, when Spain was fighting Great Britain during our American revolution, it is true Spain was not an ally of the colonies. Nothing could be further from the truth, because Spain was not interested in breaking up any colonial empire. But at the same time, she had a war on which she had to fight in various locations. The same way with Great Britain.

As a matter of fact, even looking at World War II and the affinity between Hitler and Tojo, the heat in the Pacific really was not all that great, but there was a war going on. That has to be thought out carefully because when we used to talk about 2 and 2½ wars or something like that, it was a detriment to the national defense of our country. Everybody knew you were not going to have two wars at once. You in fact have one war that is very large and the allies may be different, but you have one war on, and that is what it amounts to. I think that we should get that 1½ war theory behind us because it is just not a reality.

Now, I would like you to tell us, if you can, how does the DOD plans to maintain a peacetime industrial base and a pool of trained people to constitute over a month or a year total force structure?

By way of backing this up, I am Chairman of the Seapower Subcommittee and I have two problems in that Subcommittee that are troublesome. One has to do with the stockpile, and it is not Navy at

all. It is just a stockpile. The attitude of the Executive Branch for the last 20 years has been that they would like to dip into it and make the balance of the budget look better. They do not really plan for what should be planned for. That is a pity. I hope that can be corrected.

The same thing is true about shipbuilding and particularly fast sealift. Congress passed 2 or 3 years ago an entry into that field to get some good sealift, fair sealift. We eventually gave them almost \$2 billion altogether of which the vast majority has been spent for something that has absolutely nothing to do with the Navy, nothing to do with sealift at all.

Now we have it sufficiently cornered where it is going to have to be done for sealift, but I still don't see anybody coming up with a real plan. When I read that the Department of Defense is thinking about acquiring two or three ROROs, I thought that is great; that is probably what we need. But there is no real plan about how to get two things accomplished: (1) to get a fast sealift; and (2) to keep our shipbuilding base sufficiently operating at the level where we can build ships if we have to do it.

Can you address any of these questions for me?

Admiral JEREMIAH. Let me address the sealift capability because I agree. It is essential and both airlift and sealift clearly come out of this Operation Desert Storm as an area where we have to pay attention to it. We knew that going in.

We have been directed by the Congress to conduct a mobility requirements study. We are taking that one seriously. We are working it in the Joint Staff. We will have an interim report to you at the end of this month. A complete report with the concurrence of the Staff by November. I expect that once the Secretary has had an opportunity to review the interim report, that you will see some action with respect to the allocation of resources to—

Mr. BENNETT. That is good news.

Admiral JEREMIAH. Deal with the sealift out of those funds that are available to it.

With respect to the—

Mr. BENNETT. Stockpile?

Admiral JEREMIAH. Shipbuilding industry, the burden for that has been carried on the back of the Department of Defense. That is a backhanded way of saying it. But the facts of the matter are that the Department of Defense has been the only purchaser of sealift, of commercial shipping, any shipping, in the United States for a number of years. I think that that is a question that has to be addressed in a slightly different forum but it is clearly important for us to look at whatever we can do to improve the capability of the United States to have an organic shipbuilding industry and an organic sealift capability.

One of the things that will improve that I think is as we transition the sealift requirement from steam to gas turbine or diesel. That sounds like kind of a silly thing, but we then begin to play into the hand of the available pool of talent in the maritime industry. Admittedly small in the United States, but necessarily in the more modern end of the spectrum. As we move out of steamships and into the diesel and gas turbine ships, I think we will find better capability.

Stockpile with respect to fuel energy?

Mr. BENNETT. Well, for instance, bauxite. We have not converted it to aluminum. You have got a lot of things stored that are viewed by DOD and the OMB as a way to get money occasionally, not as a defense for our country by having this material available.

A lot of it is not in a condition that can be used right away.

Admiral JEREMIAH. I think that that is going to be increasingly important and it is something we have to look at as part of the reconstitution piece of the package that we put to you. Quite frankly, we have not had an opportunity, at least on the military side, to address that.

Mr. BENNETT. I just wanted to raise it because——

Admiral JEREMIAH. Yes, sir.

Mr. BENNETT. Because you might want to make an observation about it to the Secretary.

I am raising it, and I raise it at every opportunity I have, because I am chairman of the subcommittee and I realize that the OMB has a greater impact upon the stockpile than does the Department of Defense. In other words, it is sort of a bastard at a family reunion.

That is also true of mercantile ships that you were referring to. In other words, nobody really wants to take this on their back. They know it should be done but it is not being done. I think it has to be done by the Department of Defense. In other words, I do not believe you can put either of these issues on the back of the Navy. The Navy need combatant ships. You are coming down from a 600 goal to 450, and that, in my opinion, is too much of a comedown. I think you should still be a 600-ship Navy. But you are doing it. That being so, I think you have to realize the Navy is not in a position to want to build a lot of fast sealift ships. Also, there is nobody that wants to be the mother of the stockpile. The Department of Defense has to be. There is no other body that can do it. You have got to be the mother. OK?

Mr. LIBBY. Let me just make two comments. They may cut actually in opposite directions.

The first is that in connection with the greater look at mobility, we also need to consider the virtues of things like prepositioning and maritime prepositioning ships. They can prove their value, and to a certain extent they did so in the Persian Gulf.

The second is that there is no question that industrial capacity is undeniably playing a large role as we look at our programmatic decisions for the future. They did last year as we went through the major warship review and will continue to be the case. There is a severe problem pointed out by the Admiral's charts earlier on.

Mr. BENNETT. Well, I wanted to raise the question because there are things that the Department of Defense really has not got its hands on and they should be taken care of.

The CHAIRMAN. Pat Schroeder.

Mrs. SCHROEDER. Thank you, Mr. Chairman.

I want to thank both of our witnesses. I listen and I realize it is very confusing. In a way, it sounds like everything has changed but nothing has changed. So, we are trying to process exactly where we are going.

One of the things that I see that we have a lot of trouble with in this post-Desert Storm world and no longer bi-polar world, is when we are going to answer the 911 call and when we are not. Since we do not have that criteria laid out, it is a little hard to know where to preposition anything. Back in the bi-polar world, we knew where to preposition things. We knew where the bright line was. But now we do not really know where to go.

There was a great cartoon in the New Yorker this week that I think proves it. You had the President of Lithuania looking out the window with President Bush on the phone. The President of Lithuania was saying, "I think you'll want to come now. There's been changed circumstances" with oil gushing out in front. So many people will be trying to see when we are going to answer the phone and when we are not. We understand that there is a lot of turbulence in the world but we do not understand what the criteria is for when and where we will intervene.

That brings me to my second point. I think the second lesson or one of the most important lessons of Desert Storm is how important mobility is. I grant you that I chair a subcommittee where we are going to have a lot of pain and that might be what I am anticipating in the next couple of months. I chair the base subcommittee and when that April 15th list comes out, there are going to be a lot of people wanting to know why their bases got closed and why we are not bringing back from overseas and dual basing them.

Last year in that subcommittee, we had asked the Defense Department to look at the concept of dual basing. It seems to me that Desert Storm only proves our point that dual basing makes an incredible amount of sense. Because dual basing means you basically position most troops in the U.S., not all troops, and then you take the service member only and temporarily move them with rapid deployment somewhere where they jointly train with other forces.

Now, I would think after Desert Storm that looks like very valuable training. You throw people on planes or ships fast and move them someplace fast and do the dual training and then come back to the U.S. It saves lots of money. It saves all sorts of future problems with spouses and everybody who is over there training but nicely based in the U.S. I think we learn something from it.

So I was a little disappointed that we have not talked more about dual basing and I hope that you continue to look at it. It is going to be hard to sell to my subcommittee that you are coming down from eight air wings to three air wings in Europe but you still need a new base in Europe. I mean you had eight. You are going to go to three. But none of the ones we are moving out of are good enough and we need to put a new one in.

If you understand that we are closing another 25 percent of the bases back home, the real question is: if deployment costs a couple of more hours in the air because we do not really know where we are going and when we answer the call, I think dual basing starts to make much more sense in this much more complex confused world. I wish we could hear more about it before we start closing some things and then 5 years later decide to start reopening things.

When you bring home 300,000 troops from overseas or something, where are you going to put them? How are you going to do it? We never hear the answers to that and I know we are going to

have everybody in front of our subcommittee in 2 months saying, "Don't close us here. We'll take them." I will not blame them. I would be doing the same thing. So I wish you would have looked at dual basing a little more as we asked you to do in last year's budget.

Mr. LIBBY. I think that your reference to the Persian Gulf is instructive here. There is no question that as we look forward toward future security arrangements in the Persian Gulf and the U.S. presence, the notion of temporary introduction of U.S. forces rather than permanent basing is one that is very attractive. President Bush has even discussed it to some extent.

As I mentioned in my statement, there are notions of joint exercises in training. Temporary introduction of forces into the region on a regular but not continuous basis—that will play an important part in that particular theater.

Dual basing, I leave the economics of it more to the accountants. They tend to tell me that in fact it can be more expensive rather than less expensive. But that is a subject that I know you will have a chance to get into deeper I think even later in this committee perhaps.

As to prepositioning, it is more mystifying today where the 911 call will come from and where you have to be. In George Kennan's era, he had a simple rule. You sort of had to be in a lot of places. We have the luxury, which we have earned, to now take a closer look at where it best serves our particular interest to be.

There are a few places where I think we can safely predict it does and prepositioning makes sense. Europe, the Persian Gulf after this experience, and in the Far East.

Mrs. SCHROEDER. Well, I thank you. As I say, I am pleased to hear you talk about prepositioning. The subcommittee looked at that and we did preposition in the Gulf. It turned out to be very fortuitous that we did.

Operations out of Diego Garcia and hospital ships proved to be mobile things that we could use. In a way that is kind of a dual based—there is nothing more like a dual-based ship. That is multi-based. I mean that is the best of all possible worlds, a hospital ship you can take anywhere.

There's an argument about dual basing being more expensive. We have had every accountant in the world look at it and never figured out how they can always say it is more expensive. But since we are going to be doing joint exercises anyway, and we are already TDYing people around for the joint exercises, I do not think it is really fair that you tack that on the bill. That is the only way I see they can even come close to getting their numbers, because you save so much in personnel costs because you are not every few months and move furniture, kids, people, dogs and canaries. Just the fact that we sent 342,000 cases of pet food to Germany a month gives you some idea of what we are dealing with.

I just cannot believe dual basing is more expensive. I hope you really get them to scrub those numbers, because everyone we have had go through them does not come up with anything close to it, and especially now that we are looking at probably a little different more mobile-type training in the future.

I thank you, Mr. Chairman.

The CHAIRMAN. Mr. Spence.

Mr. SPENCE. Thank you, Mr. Chairman.

Thank you too, gentlemen, for coming today and helping us out on the overall strategy problems.

This, as I understand it, is a new strategy developed by DOD. Even though I see reference made to the Persian Gulf conflict, Desert Storm, Desert Shield, I wonder if we have had enough time really to include in this new strategy the lessons learned from Desert Storm. We have not had an opportunity, it would seem to me, to really analyze the situation to see what kind of lesson we should have learned from Desert Storm and whether this would change our strategy that we set forth here. Was this really taken into consideration in that depth?

Mr. LIBBY. There is no question we have many lessons to learn from Operation Desert Storm that will take an enormous amount of time to discern. We will pay defense contractors to look at it left, right, upside and from the bottom. Those still have to come and they will have effects in the future.

To the extent that we could plan for this sort of an event, did try to plan for this sort of event, beginning in the fall of 1989. So, yes, there are many lessons still to be learned and they may have consequences, as the Admiral testified earlier. But some were thought about and some are included in this strategy and the force structure that flowed from it.

Admiral JEREMIAH. I think it is fair to say that the strategy is probably not likely to change dramatically as a result of Desert Shield or Desert Storm, but some elements of the force structure as we continue to work into the analytical data may change along the lines that Mr. Dellums has suggested, perhaps not as dramatically. Also perhaps in terms of some elements of force structure.

But the answer to that may well spill out over a fairly extensive period of time because it is going to depend not on first impressions but on a fairly hard look at the analytical data to see what it really says.

That is going on by—undertaken by each of the services right now. They have had teams in the theater who are looking at the impact of our weapons systems on T-72 tanks, what we can learn from that. What we have learned from the tactics that are out there and that kind of reconstruction is ongoing right now headed by the individual services with the Secretary very keen on getting results back from them in the very near term if he can.

Mr. SPENCE. That was the point I was making. I am sure our first impression might be that we need to do this and do that, refine our strategy and so forth. But it seems to me that it will take a little studying to really learn some lessons. In that connection, I see from the raw numbers that it was suggesting a rather large amphibious capability. Is that based on the fact that you are going to consider focusing on two regional conflicts at one time and they will both have to take into consideration the large number of amphibious-type lift capability?

Admiral JEREMIAH. I think that is a fairly useful illustration of what we had intended in the strategy. We have that lift. We used both the 4th and the 5th MEB to conduct operations off Kuwait. The 5th MEB went ashore administratively. The 4th was offshore

and provided basically a fixing action that fixed at least six, perhaps more, Iraqi divisions in coastal defense operations. Kept them away from the other forces that were conducting the fundamental land assault. So in that case we were dealing with mass against a particular single scenario.

In another case we might indeed have to deal with an operation off Liberia that took part of that amphibious lift and something going on in a Philippine insurrection or some such thing as that that would take the other part of the lift.

At the front end of that first chart we had a Philippine problem in December in which we had several amphibious ready groups offshore and carrier battle groups if needed, if requested, if determined to be necessary. At the same time we had some amphibious forces operating in the Mediterranean. But it is not a one-scenario, two-scenario sort of thing.

Mr. SPENCE. Is it also not fair to say that what you normally consider an amphibious operation has changed a great deal in recent years, especially in this operation flying over the beach with helicopters and those kind of things? It is still an amphibious operation. That is all I had.

The CHAIRMAN. Mr. Skelton.

Mr. SKELTON. Thank you, Mr. Chairman.

Mr. Libby, we welcome you, and Admiral Jeremiah, we thank you for being with us today, one of America's most able leaders.

I would like to ask a few questions in terms of background. On February 28, 1990, Secretary Wolfowitz included a chart in his prepared remarks on Soviet military production, Mr. Libby. Would it be possible to expand the chart by including the period of time since 1985 when Gorbachev came into power, and update it up through this year? Second, could the chart also include American production figures so we can make some rough comparison between the Soviet and the American military product? Third, would you be kind enough to provide the committee such information for the record by the end of April? That would give you some 6 weeks. I think that would be very, very helpful to us in the days ahead.

Also, Mr. Secretary, last year the DOD published the booklet, Soviet Military Power. Late in the year, the letter to us was signed by Secretary Cheney on September 25. To be of any use in the budget deliberations, the book really should be published earlier in the year. At the latest, in March. I think that if you would look at those housekeeping items, I would certainly appreciate it. Admiral Jeremiah, if you could put that chart back up there that deals with the various draw-down divisions that you have?

That's correct, yes.

Thank you. I would like to ask questions, and I suppose, Admiral Jeremiah, you might be the one to address most of these questions to.

Our friend, Mr. Libby, testified particularly to the uncertainty of the future. Your testimony, Mr. Libby, really laid a pretty good foundation for increasing or leveling out the force structure as opposed to cutting it back as it is. Add to that the additional commitment back in the late 1970s of the Indian Ocean and the lessons that we should have learned from Desert Storm, I wonder if we are not dealing with dated material.

The President made a policy statement on August the 2nd, is that not correct? Based upon that, Admiral, you get the force structure sliding down to 1995, is that correct?

Admiral JEREMIAH. That is correct.

Mr. SKELTON. So that does not take into consideration Desert Storm.

Admiral JEREMIAH. That is correct.

Mr. SKELTON. I assume that the Chairman, you, and the other members of the Joint Chiefs of Staff will be looking at the entire force structure in light of the lessons learned from Desert Storm.

Admiral JEREMIAH. That is also correct.

Mr. SKELTON. I suppose it is also understood, Admiral, that 18 months ago, the last thing in the world any of us thought we would be involved in would be a major land, sea and air battle with Iraq.

Admiral JEREMIAH. I would have to think about that one a little bit because one of the planning assumptions and some of the studies we made dealt not with the specific scenario, but what kind of air defense systems might aircraft be required to operate against. In fact, the Navy had a study that it used a combination of air defense and predominantly it was modeled on an Iraqi air defense system.

Mr. SKELTON. All right.

Admiral JEREMIAH. As you probably are well aware, not quite a year ago, General Schwarzkopf indeed was using our modeling and war-fighting capabilities to model the potential for such an action, and that in fact turned out to be the basis for many of the early decisions that were made in Iraq.

Mr. SKELTON. As a matter of fact, we drew down quite a few thousand troops out of Europe to fight this war, did we not?

Admiral JEREMIAH. That is correct.

Mr. SKELTON. Do you have a ball park figure as to how many we brought in?

Admiral JEREMIAH. The VII Corps basically.

Mr. SKELTON. The whole VII Corps basically.

Admiral JEREMIAH. The freedom to do that came out of the emerging—the new realities of what was going on in Europe.

Mr. SKELTON. Had we not had a strong military capability worldwide including Europe, which was there for the Soviet threat, we would not have been able to pull this off as we did.

Admiral JEREMIAH. I think that the testimony of the Chairman, the Secretary, and the service chiefs to plus or minus some degree in the “yes, but/no, but” category said the exact replication of what we did, we could not do. We would do it with difficulty and we would do it with increased risk.

Mr. SKELTON. That would be the case in 1995, is that correct?

Admiral JEREMIAH. That is correct.

Mr. SKELTON. So there would be increased risk.

Admiral JEREMIAH. Yes, sir.

Mr. SKELTON. I assume by your answers that the service chiefs have not agreed to any permanent force structure in light of the lessons to be discussed out of Desert Storm, is that correct?

Admiral JEREMIAH. The service chiefs have not what? I am sorry, I did not hear you.

Mr. SKELTON. Have not agreed to the force structure in light of the lessons that have been learned.

Admiral JEREMIAH. That is fair. Now, I think that General Vuono had some extensive discussion and testimony on some initial kinds of responses such as those that Mr. Spence referred to that are 'first looks' but no substantive changes.

Mr. SKELTON. In light of the force structure up here on the chart, Admiral, have any of your war colleges—which by the way I have personal knowledge do first class work—and your strategic study groups war gamed future contingency problems with the 1995 force structure that are comparable to (a) Desert Storm, (b) two major conflicts going on at the same time, to your knowledge?

Admiral JEREMIAH. To my immediate knowledge, they have not so far, unless you have any information. The Naval War College I think in their global war games this summer will address that in part.

Mr. SKELTON. With the 1995 force structure as the good Colonel has up here, is that correct?

Admiral JEREMIAH. I think in part, yes, sir.

Mr. SKELTON. If a country lawyer could give a suggestion; before you rush to judgment and marry yourself to the 1995 force structure, you should have every conceivable strategic study group under your control and war college at your command work out force structures that would be necessary in the event of future Desert Storm-type operations and two of them going on at the same time, which can happen. Would that be a reasonable request, Admiral?

Admiral JEREMIAH. It may very well be a request. It may also be a legitimate question to ask, "What is the capability of this force and what can it do?" other than populating the scenarios. But I think you are quite right. I would stipulate by the by that the Secretary and the Chairman have both said that events in the world can change. That they may very well be back here talking about a different kind of force structure at some point in the future if they see that those events have changed markedly. So that implicitly implies that they will go to other sources and take advantage of these lessons learned to understand what is going on.

Mr. SKELTON. Admiral, we have had consistent problems of reinforcing Western Europe with active duty forces, active duty divisions. In light of the problems brought to light in the hearing on the so-called round-out National Guard brigades, do you think we can rely on them in the future of ground action—can they play the role along with active duty divisions in a round-out capacity?

Admiral JEREMIAH. Let me address the reserves in a little larger context first and say that as others have testified before me, I think we would not be able to have accomplished Operation Desert Storm without the strong support of the reserve forces. They were superb and they did the things either in theater or here in CONUS and follow-on elements. Their contribution was significant, important and very highly valued.

Mr. SKELTON. Admiral, I could not agree with you more.

Admiral JEREMIAH. With respect to the round out—

Mr. SKELTON. I am asking you about the round-out National Guard divisions. As you know, there were the three brigades that there seemed to be some question about.

Admiral JEREMIAH. You have had I think about 4 hours of testimony on this with FORCECOM—

Mr. SKELTON. We did, we did.

Admiral JEREMIAH. Three commanders, and I suspect that you are probably far better conversant with the problem now—

Mr. SKELTON. My question to you is, because you in the seat of power, do you think you could rely on them in the future?

Admiral JEREMIAH. I think that is a question we have to continue to look at now that we have General Vuono's initial responses out of this evaluation of what was going on out there.

Mr. SKELTON. I would hope, Admiral, that the folks on the military side and Mr. Libby's people on the civilian side would take a good hard look at where we are going. Next year a good part of your report should be in answer to last year's law, Section 901, entitled "National Military Strategy Reports" and I would direct you to that. If those questions set forth in that section are answered correctly, I think that you will see that you are coming to some erroneous conclusions based upon the figures before us now for 1995, in light of the uncertainties and what we hopefully have learned out of Desert Storm. Desert Storm, Mr. Secretary, is not a bump in the road. It is a nightmare that actually happened, and they do come to pass. History teaches us this and the future is like a kaleidoscope. Every time the world turns, something uncertain happens.

Admiral, Mr. Libby, thank you so much.

The CHAIRMAN. Mr. Sisisky.

Mr. SISISKY. Thank you, Mr. Chairman.

I guess everything has been asked of you, gentleman, by the time it gets to me. I cannot help but be delighted that we have a strategy now. Last year at this time we did not have a change in strategy. I think that the Department of Defense reacted very well.

The number one problem, a big problem, is what you have called reconstitution. You have already said that it is the industrial base. To me, it is the most critical problem that we face. I mean there is no question about it. How you solve that, of course, is going to be the biggest problem.

But let me just get down to two things. One I did not understand is carrier battle groups.

Admiral JEREMIAH. Yes.

Mr. SISISKY. I thought we had 14 carriers, not 13, in 1990. Did we lose one somewhere?

Admiral JEREMIAH. We have at the present time I think what we are talking about is—I am going to go to the record.

Mr. SISISKY. Well, regardless of that, because I was going to make a point.

Admiral JEREMIAH. Thirteen deployable carriers.

Mr. SISISKY. We have 13—

Admiral JEREMIAH. In 1990.

Mr. SISISKY. Where did we lose one? I thought we had 14. We are going to have six in the Atlantic and six in the Pacific. Now, where do we lose one? Which area of the world?

Admiral JEREMIAH. That is something the Navy will sort out as they go through the process of working out the decommissioning schedule for some of these ships and the introduction of the newer ships as they come in.

But I would point out that—and it goes to some of the risk assessment—associated with Operation Desert Storm we used either immediately in the very beginning or through the course of the deployment and the deployment of the replacement carriers, 10 of the 11 available, those that were not in SLEP (system life extension program) and overhaul, carriers that were available for operating deployable forces during this period of time from basically August until March.

Mr. SISISKY. Of course, that is a problem. One-third of the carrier force could be in some type of repair at the time, so—

Admiral JEREMIAH. SLEP probably by that period of time will be behind us in one form or another.

Mr. SISISKY. My next question you have answered to a certain degree. What I am concerned about, and you mentioned this in your testimony, is the obligation to operate within fiscal guidelines of the Congress. Now, that is not your only obligation.

Admiral JEREMIAH. No, sir.

Mr. SISISKY. As I understand it, your obligation is to tell the Congress what is needed to defend the national security of this Nation. So how much of this budget is driven by the fiscal restraints?

Admiral JEREMIAH. I tried to address that in the early part of the testimony in pointing out that it is part of the national objectives that derive I think from the stable economy and healthy economy that the President was looking for and that resulted in the budget agreements between the Congress and the President.

I think that it is fair to say that—General Powell, for instance, has indicated that this is a minimal force and we would be happy to have more resources but that has an impact on national security as well. As you begin to pump up the budget of the Defense Department and other parts of our budget, and the impact upon our economy also begins to spin out on the impact of our ability to be a strong nation operating in the world. So it cuts both ways.

Mr. Libby, you might want to talk to that as well.

Mr. LIBBY. There is no question, if you were to ask any service chief or the Chairman or the Secretary, could they make use of extra resources? The answer is yes. The sliding scale here is an element of risk that has to be taken into account of at any point.

Yes, they could use more. They would desire more. But under the pressures of the current situation, can they prudently reduce? Are there circumstances in the world that would enable such reduction? We believe there is headed toward 1995.

But let me emphasize, and this picks up on a point made earlier. That it is important that we keep our heads up while we are doing it. We have to look around in 1992, 1993, 1994, and see how the world continues to progress.

If by 1995 the Soviets have picked up the slack and continued on the trend of reforms that we saw in the early part of 1990 that gave us all so much hope, then I think we would all feel a lot more comfortable. If on the other hand, instances like Desert Storm reoc-

cur, or there are adverse trends in the Soviet Union, we will need to rethink and the Secretary has clearly stated that earlier on.

So he is very much in agreement with you, sir, on the need to stay awake to these developments.

Mr. SISISKY. Admiral Jeremiah, in your presentation, you called for 75 B-2 bombers.

Admiral JEREMIAH. Yes, sir.

Mr. SISISKY. Is that your wish list? I mean you know what the position of Congress is. I am only giving you the opportunity to say why 75 is important, particularly in face of what happened with the B-1 in this last exercise. In the real world I just do not think that Congress is willing to do that. I will give you the opportunity because you will not be involved, I do not think, in that debate. You may have the opportunity now to do it.

Admiral JEREMIAH. I think that crosses between both of us. But let me take a crack at it. I think we feel it is important to have in the strategic forces a viable bomber force. It gives us a survivable leg. It gives us one that has the ability to be controlled to some considerable degree. It is a force that if you extrapolate and I recognize it is not necessarily the same, but if you extrapolate from the experience we had in Operation Desert Storm in this case with the F-117 and admittedly a very expensive aircraft but one that paid off handsomely in the ability to be a strike breaker along with cruise missiles and break open the air defense systems so that other forces could come in.

So also I think there is an analogy in our strategic side where we want that type of capability to be able to open up and get in with strategic forces for those extremely hard targets that are heavily protected and very deep. What we see in the capability so far demonstrated we believe in the B-2 is a very solid capability to do that.

While the individual unit price is high, I think you are also going to—the program total is reduced from that which shows our original objective and it was with that kind of ability to break open and get access that we intended to resize accordingly.

Mr. LIBBY. The constant theme we have heard from the panel is to be alert to the measures that we can learn from Operation Desert Storm. Clearly the value of Stealth is one of those lessons.

We will need in the future I think to be looking at measures broader than unit cost in assessing whether a system is the right system or not. We will have to look at what other systems would be needed in order to do the job. We will have to look at minimizing the risk in making our systems politically usable for the President when he reaches a crisis and has to decide, am I willing to lose a pilot over a certain city? Or do I prefer a system that I believe will get us in and get us out safely? All of these factors will need to be rolled up into one decision as the time goes on.

How that will play out, in particular with the B-2 debate, I cannot predict. I can predict, I believe, that Stealth will have an important part in the future of our forces.

The CHAIRMAN. Mr. McCrery.

Mr. MCCREY. Thank you, Mr. Chairman.

After waiting patiently for a couple of hours, I am pleased that Mr. Sisisky did ask the question that I was waiting to ask. That is, how much of this strategy is budget driven and how much is threat

driven. You have adequately addressed that. Thank you. I think the bottom line is that a good part of this strategy is in fact budget driven and not driven by the threat or risk. That as the budget goes down, the risk goes up.

Admiral JEREMIAH. I think that is a truism across the board. It is not necessarily a criticism of what has been done here, because I think that it does recognize the changing circumstances in Europe, which is a very dominant theme in this change in strategy and it does reflect the regional kinds of contingencies. I think one of the things that we saw happen in Desert Shield is the utilization of—even before these forces were specified—or after they were specified in these terms, with the utilization of the contingency force, to move in rapidly and establish the security in the area followed by essentially where both the Atlantic and Pacific forces, the heavier forces dominantly from CONUS and Europe came out of the Atlantic forces, and the maritime forces that came out of the Pacific and the Atlantic to support it.

Now, we have put some labels and packages on these to understand what the context of those forces were and what their principal characteristics were, but they in fact played in that set of sequences in the activities in the Middle East.

Mr. LIBBY. No question the dramatic changes in 1989 played a large part in the creation of this strategy and in the thinking. There is a budget element.

But it is also true, and I was personally very impressed to see at every turn, from the fall of 1989 through the President's speech and since, Secretary Cheney and the Chairman, and Under Secretary Wolfowitz continually pounding in at every session. "Why do we need this in the new world? Is this one of the systems designed for the environment that we were thinking we were going to fight, but we don't think we're going to fight right now? Or if we do, it's a much reduced threat." It really was quite remarkable at every turn how they brought that question back to the fore. So there is a great deal in the events that drove this strategy and the decisions here.

The CHAIRMAN. Mr. Ray.

Mr. RAY. Thank you, Mr. Chairman.

Admiral Jeremiah and Secretary Libby, where do you see the threat in the Pacific? I recently was in the Pacific and I know that there is a lot going on out there. I know that we have a heavy contingency force in Okinawa, for instance, with 40,000 Marines, and I know we had them there at one time. I guess because of the North Korean threat, the Soviet threat when it was at Cam Ranh Bay, but where do you see it now?

Admiral JEREMIAH. I think that you have to continue to treat the Korean Peninsula as the area that is most potentially explosive, perhaps in the world, certainly in the Pacific. There is a substantial array of forces in North Korea with a government which is probably least exposed to the outside world. We saw in Saddam Hussein an individual who was not exposed to the rest of the world and made mistakes in judgment because of that. I think you have the similar kind of situation in North Korea, particularly if that leadership changes. So I would say that that is one of the very first areas.

The second area that one could postulate, and you speculate to some degree, but certainly there is competition for resources and access in the South China Sea. There is confluence of countries that are capable militarily and economically who have interests in many of the islands in the South China Sea and the resources that are associated with those islands. There is also an enormous amount of traffic through the South China Sea for commercial purposes. So I would suggest that that is an area where the potential for conflict exists.

Mr. RAY. Do either of you see any easing of the tensions between North and South Korea? Recently in December, for instance, the CINC there and the negotiators indicated that they could see some light at the end of the tunnel. That the American negotiator there, an admiral, who was doing such a fine job there, is going to move back and a South Korean is going to take his seat.

In addition, China has sent signals that they will not be doing a whole lot more business with North Korea and the Soviets have also sent that same message. Do you see any easing of those tensions, either of you?

Admiral JEREMIAH. Do you want to take it?

Mr. LIBBY. I think that, yes, there is light at the end of the tunnel, but it is very far down the line.

Mr. RAY. Way down the road.

Mr. LIBBY. I think it is going to be a relatively long term process. Having said that, you fall into the category of all the other prognosticators of the future and you may or may not be even close to right. But from where I sit and from what I saw in the Pacific before I came to Washington, my perception is that it will be a relatively long path.

Admiral JEREMIAH. I would agree with that. I think there is going to be a long path. I do think there have been some recent statements which give us some reason for optimism, and we are, after all, an optimistic people. I do have a certain reaction to the phrase "light at the end of the tunnel." I always reach for my wallet at this point.

On your previous question, if I could just add one word about the situation in the Pacific. It is a luxury that we have earned that we can sit back and say, "Where is the threat in the Pacific?" It is important in that context to sort of take a look at what has been out there. I think if you talk to the nations in the region, as you have, you will see that there is an important endorsement from those nations privately, if not always publicly, of the value of the U.S. presence in the region. In damping down problems, avoiding vacuums, or setting in place of arms races, or regional concerns that might otherwise occur were we not there and committed to staying there.

Mr. RAY. I see. So you would see our own forces kept in Japan or Okinawa, for instance, on a fairly stable basis. It will continue at about the same level that we have it there now?

Mr. LIBBY. In response to a congressional study, we have undertaken, I believe in the early part of last year, and completed the initial phase of a study known as The East Asian Strategy Initiative which does call for a drawdown of forces from East Asia in several different stages, but that would remain in the end a U.S. presence of some significance.

Mr. RAY. My final question. Would you care to put in the record the contribution that Japan is making to us with our troops there? I know it is substantial. In fact, I do not think we could afford to be there if they were not making a substantial contribution. It is popular to bash Japan this day and time, but please comment on that.

Mr. LIBBY. It is a very significant contribution, and through recent discussions, it is increasing. We will put in the record the exact numbers for you.

[The following information was received for the record:]

JAPAN BURDENSARING

Japan currently pays about \$3 billion per year in HNS, by far the largest HNS payments of any U.S. ally. This represents about 40 percent of the total cost of maintaining U.S. Forces in Japan (or about \$60,000 per U.S. service person stationed in Japan).

This current special agreement covering Host Nation Support costs does not expire until calendar year 1992, but Japan has agreed to enter into a new special agreement in 1991. The new Host Nation Support agreement which Secretary Baker and Foreign Minister Nakayama signed on January 14, 1991, provides for Japan to assume, over 5 years beginning in Japanese Fiscal Year 1991 (starting April 1, 1991), payments for all Japanese labor and utilities costs borne currently by U.S. Forces Japan. The new HNS agreement will save the United States Government hundreds of millions of dollars each year, in increasing increments. In 1991 the GOJ's additional payments will be about \$200 million. By 1995 we project that additional payments will total about \$730 million annually. The total new payments under the agreement will be \$1.7 billion. Added to the GOJ's already substantial HNS payments, total Japanese HNS payments over the next 5 years will approach, and could exceed, \$17 billion.

This means that Japan will pay more than 73 percent of the total cost of the U.S. presence, excluding military and civilian salaries.

Mr. RAY. OK. Well, let me just add to that a little bit, because I want to support that. I want to give them a little credit. As I understand, they furnish 100 percent of all military construction, all of our energy for 1992, all of the fuel, electricity, and so forth, that we will need to generate energy there, and all of the civilian labor. In addition to that, they have bought \$80 billion worth of American bonds and have just paid off that \$13 billion to their contribution to the Middle East, so I understand. I just thought we ought to say a good word about Japan every now and then.

Mr. LIBBY. I believe it is our most successful host nation support and burden-sharing effort.

Mr. RAY. In fact, we could not be there without that support, could we?

Mr. LIBBY. Not without your willingness.

Mr. RAY. Thank you.

The CHAIRMAN. Mr. Dellums.

Mr. DELLUMS. Thank you very much, Mr. Chairman.

Mr. Libby and Admiral Jeremiah, first let me preface my remarks by saying I appreciate the answer that you gave me to my question.

I would like to restate it and perhaps, if you would like to respond further you may. It is perhaps for my own comfort level that I have accurately put the issue before you.

I have said on a number of occasions since our involvement in the Persian Gulf that American people should not become enamored of these high-tech extraordinary weapons of destruction, but rather come to fear them. What I made reference to was that if we

continue as a nation to pursue war as an instrument of solving international disputes, then Desert Storm has unfortunately given the American people an opportunity to look through a window into the future of war and to the future of the battlefield.

What I made reference to is: we went to war with Iraq, a nation that was for the most part a ground force fighting from a defensive ground force perspective. We then responded with extraordinary high-tech capability. If we went to war on the other end of the continuum, say, with the Soviet Union, heaven forbid, I do not perceive that as a ground force-to-ground force war, but standoff to standoff. The battlefield would expand perhaps even to become an intercontinental battlefield.

In between the Soviet Union, with extraordinary high tech and the only nation that could destroy us, any nation with standoff capability on that end—Iraq, a ground force on this end—any other military force in between those two continuums would not diminish the use of high tech. It would continue the use of high tech.

Again, I say that I believe that does indeed have enormous implications for the notion of ground force troops that you would deploy.

Admiral, one of your responses near the end of your comment was, "Well, you are always going to need ground forces because somebody has got to knock on the door." If we are engaging in Third World struggles or regional struggles, you do not need hundreds of thousands of troops knocking on doors. If we ever go to war with the Soviet Union, there may not be any doors to knock on. So I am not sure of the relevance of that remark. If you choose to respond, you can. We can move that aside.

I ask one additional question. I go to the area of the B-2 bomber. I realize that the position of the administration is to support the B-2 bomber.

The question that I would raise is: what would you have done in Desert Shield with a weapon as sophisticated as the B-2, a multi-million dollar plane? How would you have used the B-2 in the Persian Gulf that would give you something you already did not have against a nation whose air capability was destroyed within hours? Number two, if we had difficulty locating relocatable targets as crude as the Scud missile, then what gives us any notion that with the sophisticated weapon like the B-2 going against a nation with greater technological superiority, we would more readily use the B-2 to find relocatable targets in that context? One of the arguments is, "Well, we could use B-2 in a Third World scenario." What does that give you in the reality?

One of the more stealthy bombers in our inventory was the B-1. It disappeared off the radar screen for several months and we went back to this so-called tired old B-52 dangerous weapon that everybody said we used that bombed the Iraqis into oblivion.

So what does the B-2 give us in that context? If we went to war with the Soviet Union, how does it find relocatable targets when we know right now that it lacks that capability? Why are we continuing to argue for a B-2 in a limited-dollar environment with extraordinary pressures on our budget? We have other wars that we ought to fight if we want to continue to use that military concept like wars on poverty, housing, and education and these kinds of things? How do you respond to that?

Mr. LIBBY. Let me start with the first part and maybe we can team up on the second. Operation Desert Storm, I think—first let me say that I agree with you that the high-tech weapons are, in many senses, horrific. They have enormous accuracy and enormous lethality. There are, no doubt, some byproducts that are useful in their accuracy. Collateral damage is minimized, and that is to the good.

But if you look at Operation Desert Storm as a window on the world of what systems can do, yes, it should give us great pause.

We did not proceed into Operation Desert Storm as a measure of solving problems rashly or hastily but only after due concern for all other possible measures that might have been solved after endorsement by this body in full debate.

Clausewitz warns us that war is brutal and I believe that the cautions you were sounding must be heard. We must not assume that we will have in the future on our own side as easy time as this or ignore in the future the human suffering that is on the other side, even when we are as successful as we were. Nonetheless, there are situations in which war as an instrument of national policy must be upheld. That is why we call ourselves the Department of Defense. We prefer to deter it but to be ready to handle it.

Admiral JEREMIAH. I would second that. War is horrific, and that is why people like General Schwarzkopf and General Powell and others have worked so hard in the process to try to limit the casualties on our side, because those are the people we are obligated to defend when it comes to the point where you are going to begin to engage in conflict.

I would point out that Iraq was not initially a defensive army. Iraq was an offensive army that took a sovereign nation and incorporated it into the—

Mr. DELLUMS. I do not want you to create a straw man that I was not trying to put out there.

Admiral JEREMIAH. OK.

Mr. DELLUMS. What I said was that we are fighting basically from a defensive position as a ground force. I mean these people were not an air superior force. They were a ground force. That is the point I am trying to make.

Admiral JEREMIAH. They had an air force. They did not employ it very effectively but the force was there and it posed a threat to us. It was for that reason that we used a good deal of the stealthy capability early on to take apart the aero defense systems.

I think that same analogy, as I indicated earlier, applies to some extent when you begin to have to go—if you go into a strategic war. You still want to have that kind of capability in a bomber force as is going to be engaged in a war with a strategic enemy. How you might use that capability once procured for a strategic purpose in conventional war is a question I think that is a legitimate one. It is a decision that has to be made at the time when you look at the choices available to you. Will you choose to put a weapons system of that cost against that particular target.

Under certain circumstances, we have chosen not to do that with some weapons systems. You do not generally put aircraft carriers 3 miles off the beach where they are susceptible to shore interdiction by gunfire, missiles and things like that.

Now, on the other hand, if you have a reason for national security purposes and, I will not try to suggest what those might be, to engage in hostilities with a nation and you have not the access that we had, for instance, in the Middle East, but you must come from great distances, then you begin to think about the combination of land-based long-range air and sea-based air, if you cannot get tac air bases—land bases close by—if you have to carry out a raid or a strike or a campaign against a distant nation in which we have chosen to become engaged in hostilities. Under those circumstances, there is a possibility that you would want to use something like a B-2 in a conventional role.

But I would suggest that you buy it first for the strategic purpose, just as we did for the B-52s, and then you would look at the conventional role as a spinoff of that capability.

Mr. DELLUMS. Just one other—I listened carefully. You gentlemen have attempted to address the points that I have made with the exception of one. That is the issue of relocatable targets.

Admiral JEREMIAH. I think that your points are quite good and bringing in the question of the whole issue of whether that is a viable employment.

Certainly with the technology we have today, we are going to have to look very hard at what we do to deal with that kind of problem, and it probably is not in air frames. It is in sensors and technology first.

Mr. DELLUMS. Mr. Chairman, if you would just permit one follow up in that regard.

I see a problem, and this is not a personal issue directed at you gentlemen. When the B-2 first came off the board, it was sold to us as a plane capable of finding relocatable targets. That was its main thrust. Then we find we lack that capability. Then we started to move around to conventional, Third World. This plane, it seems to me, is flying around trying to find a mission. It ought to be the other way around. You should have a mission that is clear and discernible and you should develop some approach to deal with that particular mission.

This plane is flying around and it is flying around at great expense. My point is why do we not just stop the misery. Put this thing to bed without attempting to continue to find, in my humble opinion, rather flimsy and weak rationales for a mega-billion dollar weapons system that in the real world of the future, even if you configure the battlefield, this plane makes no sense. It just—unless we are just wedded to it and we are just marching forward because sometimes we cannot let go. We get ego involved or we get invested and we have to just keep marching, plodding forward, as if we have got to have this thing. To step back, I do not really see a rationale for the B-2 bomber. It is still trying to find a mission.

Mr. LIBBY. It must be enormously frustrating to have a system presented to you in the fashion of its main purpose is to hit relocatable targets and then to find people say, "Well, that's not at the moment a very easy thing to do."

I personally was not first approached about the B-2 with the strategically relocatable target mission as being the prime selling point for it and therefore I do not have some of that frustration that you have on that point.

It is true, I think, that if you were able at some point——

Mr. DELLUMS. How did it come to you? I would be interested in knowing.

Mr. LIBBY. In the strategic role primarily, and also with the conventional spinoff of being able to strike targets at great distances with the stealthy capabilities, without having to bring along a lot of other assets with it.

Also in the way that a businessman would look at it, not in terms of the total cost that gets thrown up in the headlines. But in terms of the marginal cost of the next unit of production. If you are going to decide, am I going to use this asset? As a businessman you would say, well, what will it cost me to replace? Not all the past investment to get you to that point.

So it was in that general context that it came to me. Then in some small aspect it was, gee, if we ever could figure out, through sensors or else, where to hit—where a strategically relocatable target is, or if we could narrow to a number of small number of locations where it is, then this would be the only system that would really be able to get in there and go to those places and decide to release or not to release.

But this debate on the B-2 will go well beyond this. There is no question, as you point out, that a lesson of Operation Desert Storm is this is an enormously difficult task even in as a confined an area in a desert environment that we saw there.

Mr. DELLUMS. Thank you.

I will not ask you to respond, but obviously if relocatable targets are pushed off the radar screen and Third World use of this sophisticated weapon is debatable, then do you see it as a strategic weapon? The clear response to that is that given standoff capability, would it not be a lot less expensive to use a standoff capability without this expensive platform placing such a heavy burden on our tax dollars? Even if you use your assumptions, hold the same targets at risk without this notion of a manned-penetrating bomber, it seems to me this is a rather obsolete idea, given all of this enormous capability that we have just shown the world briefly in a small percentage in Desert Storm?

Mr. LIBBY. Maybe the Admiral and I can come back with a different set of briefing books and get into this in some depth.

Mr. DELLUMS. I appreciate that.

Thank you very much, Mr. Chairman.

The CHAIRMAN. Mr. Lancaster.

Mr. LANCASTER. Thank you, Mr. Chairman.

Thank you, gentlemen, for your patience and for your testimony in response to the questions.

I wonder if you can talk a little bit about the lessons learned with regard to prepositioned materiel from Desert Storm. From those lessons, could you give us some idea of the mix of land and sea prepositioning, and Europe versus the Middle East. I assume that we are going to leave some of that material that we have carried to the Persian Gulf in that region. Please talk a little bit about the future of prepositioning at this point.

Admiral JEREMIAH. Let me take a crack at that one.

Let me first say that there were significant advantages to the degree to which we had host nation support, air fields, port facilities

ties, and transportation materials that are not necessarily prepositioned but were essential to the operation.

Second, we did in fact have prepositioned material, maritime prepositioned material, which was brought in very early into the campaign. In addition to the MPS squadrons that allowed the Marines to marry up with equipment and deploy very quickly to the theater.

So there were immediate obvious advantages to prepositioning either afloat or ashore and we will look at that particularly in the Gulf region in the future, together with our allies, and I think those discussions have been ongoing between Secretary Baker and the Gulf nations in the last few days.

We have not, therefore, come to a determination on the specifics with respect to that particular follow on.

Second, we have, as I indicated earlier, a mobility requirement study, the product of which I think we will soon have and it will address the whole spectrum of sealift, airlift, and prepositioning and afloat prepositioning to try and come to the best mix.

With respect to the question that Representative Schroeder made earlier as to where you do these things, at least in some elements, the obvious answer is as close to where the far end of the problem is as you can get. With the ability to try to make it that far out point sufficiently flexible so that it may be able to respond to one or more theaters at the far end of that spectrum.

So I think that we will continue to be interested in afloat prepositioning in maritime prepositioning between the Persian Gulf and some part of the Western Pacific, for instance.

Mr. LIBBY. If I could add just one comment to that, to expand the aperture a little bit to the infrastructure as well as to the prepositioning that you raised in your question to which the Admiral responded.

The British commander who was first on the scene from the Desert Rats happened to have a conversation with me in which he just expressed his amazement at how the infrastructure that had been made obviously well in advance to make it possible to deploy those forces, even with the fast lift and the rest, this is both the dockyards and the runways and the culmination of a decade-long vision, that this was an important area of the world and these were facilities that would be needed.

Mr. LANCASTER. Well, of course, the decision of what we are going to do with the equipment that is in the Persian Gulf needs to be made immediately. We certainly do not want to go to the expense of returning all of those tanks and Bradleys and other equipment to Europe and then turn around and send them back to the Middle East if, a year from now, we have decided after a long study that those weapons systems need to be in the Middle East. So I hope that we are not going to waste that kind of money and that we will very quickly move to a decision that is both sensible and cost effective.

I had a little bit of trouble understanding the deployment of tactical fighter wings from your charts, and I wonder if you could talk a little bit about that. It appears to me that there are about five wings in the Atlantic and CONUS. The Pacific completely confuses me because you have one to fours and one to twos and all kind of

things in the Pacific. Then you have seven contingency wings. Can you talk a little bit about the contingency wings? I assumed that those were CONUS based but that we will have contingency plans for their deployment. Talk if you would just a little bit about those seven contingency wings.

Admiral JEREMIAH. I think that General McPeak may have, although I am not altogether sure that he talked about that in his testimony, but I think that the Air Force is looking increasingly at the experience in Operation Desert Shield/Desert Storm and how they are deploying their forces and are looking at packaging those wings in such a fashion so that you have capability to do a task, an expeditionary wing, if you will, that can be task oriented and deploy on short notice with common characteristics necessary to provide a full package to a theater of operations and then if it is a higher level of activity, then increasing the numbers of packages of common kinds of wings. So that you would not have a tactical fighter wing, for instance, that was all F-16s but a combination of air to air, air to ground, night and daylight.

Mr. LANCASTER. Are all of these anticipated to be CONUS based, because your chart does not indicate.

Admiral JEREMIAH. Of those that were shown in the contingency force, we would expect that those would be CONUS based. Some of the numbers are one to two, because of the consultations that are necessary with other folks before we are able to come down with definitive numbers at this level of classification.

Mr. LANCASTER. Then one last question. I am reluctant, since you have taken such a beating on B-2 already, to even mention it in another light, but I do think that we have a classic situation here of our talking about changes in the future and the threats that we face. But we continue to talk about the B-2 and Secretary Cheney continues to say that he would love to have the V-22 but just cannot afford it. The studies have indicated that the V-22 alternative is as expensive if not more expensive than the B-2, but the B-2, as an alternative to existing strategic resources, is much more expensive.

I wonder if you can talk a little bit about that type dichotomy because I frankly think that if we had had the V-22 technology in Desert Storm, it would have come in very handy. But, of course, we chose not to use the B-1 at all and my guess is if we had had the B-2, we would not have used it either.

So can we talk a little bit about why the Pentagon is so insistent that the V-22, which has strong support in Congress, has been the number one research and development project of the Marine Corps for years and is not more expensive than the alternative but far more capable. We continue to say we simply cannot afford to build it.

Admiral JEREMIAH. I think I would follow my Chairman's lead on that subject and suggest that that would be an appropriate discussion with Mr. Atwood and Mr. Cheney.

Mr. LANCASTER. We have had those discussions, but I hoped I might get a different perspective this morning.

I thank you, Madam Chairman.

Mrs. BYRON. [Presiding.] Let me apologize for being away for a while. I had to do some work for the Chairman before Rules and I

am delighted that you two are still here. I will not prolong your agony at the witness table, but I do have a few questions to ask.

First of all, Admiral, on page 13 of your written statement you have a relative standings and emerging technology, a chart, and if these questions have already been asked, you will have to bear with me.

But you list "even, losing, ahead, holding, behind, losing." Who is referred to as losing? What are we using as our guideline on losing?

Admiral JEREMIAH. We may have been inartful in the rush to get the titles in here, but in fact the United States as compared to some of our other competitors around the world in specific technologies—

Mrs. BYRON. But no one specific, it is worldwide so it could be losing—

Admiral JEREMIAH. I think that you will see that the chart does in fact talk to other nations when you look at it in the Joint Military Net Assessment document from which this is derived.

Mrs. BYRON. OK. Let me go back to a hearing that we held in this committee room last Friday with the Guard and the Reserve: those deployed versus those that were not deployed but are still in the status of getting ready.

When we look at your Base Force concept and the scenarios, you use in the Army, for example 12 active, six reserve. Air Force—and I am just picking these two—26 tactical fighter wings, 15 active, 11 reserve. Having talked just as recently as this morning to some of the Air Force that came back and after the hearing on Friday which was basically structured in Army units, the Air Force seemed to be able to integrate on a much faster, much quicker basis in many cases.

I was talking to an individual this morning who stated that the Air Force, his Reserve and Guard and active duty units that came in, hit the ground and was operational and running.

We have seen in the case of the Marine Corps, the Reserve Marine units that were deployed very quickly—2 weeks, 3 or 4 weeks time frame—integrated very quickly.

It is too early to get full data on what we have learned from that but I think there seems to be a trend and I cannot put my finger on the trend. Could you go a little more in depth on the fact of our total concept? The Chairman, Mr. Montgomery and I were the ones who were urging the Secretary back in November—we had a total concept and we had round-out units that were combat units—that we needed to find out whether that was an operational plan, whether it was one that was workable. Now as we drawdown our total force structure, which in my estimation there is no question that we are not going to drawdown 25 percent in a 5-year time frame, we need to make sure as we drawdown smartly. Those Guard and Reserve units that played in integrated part in this deployment are going to be the same ones that we must make sure not to draw them down too heavily from those efforts.

Admiral JEREMIAH. I think first—I would agree that the Air Guard units and Reserve units performed very well in Operation Desert Shield. Many of them were among the very first units to go, particularly in the transportation areas.

In looking at the Guard and Reserve and how they operate, I think that it is also fair to say that not all of the services and organizations will necessarily mobilize or treat their people in quite the same way. There are unique requirements that tend to go with combat units as opposed to combat support units. I think that the Air National Guard has a slightly different construct, and I am not an expert on this and do not intend to suggest that I am. They have a slightly different construct than perhaps the Army National Guard.

I think that in the hearings you had last week, extensive hearings, there was conversation on that subject and part of the effort on the Army's side to improve the combat capability of those units is to look at the manning, look at the composition of them with respect to Active and Reserve officers and senior enlisted personnel in the units and also look at basically the op tempo, the amount of training that they receive each year. Those will go, as I understand it, and I would defer to the Chief of Staff of the Army on the subject, some considerable way toward improving the availability of the unit. Given the scenario that existed at the time, in which we had a relatively unknown duration, a short-term—relatively short-term mobilization requirement and a relatively longer term time to get ready and then deploy, I think that had a lot to do with the decisions made at that time. Different circumstances with respect to—

Mrs. BYRON. One of the things that concerned me once August 2nd came was that we saw the initial call up, not of the round-out brigades but of other units. It seemed to me that those round-out brigades should have fairly quickly increased their capability and increased their training for their officers and their total concept.

I am not advocating removal of the round-out brigades from our priority sequence. But I think they represent an interim readiness. We have spent over the last decade an enormous amount to equip and to train those round-out brigades.

I am concerned that the Department intends to remove all Reserve presence or as much as possible from our contingency force and how close the Department can come to achieving this objective. At the same time, I think as we look back, the President probably gained a great deal of public support from the involvement of the Reserve components. A day did not go by without a local community seeing off their Guard and Reserve to Operation Desert Shield. We are now seeing each and every one of those same communities with great pride as their units are returning to the home.

So I think it is important to remain at that commitment even if it is a small operation. I think as we drawdown and look at the Reserve forces, we need to make sure that that commitment is still there.

Admiral JEREMIAH. I think that is an open question as your previous hearing would suggest. I would also say that in the context of the force structure and the scenarios that we projected and the kinds of regional conflicts that we see, and the resources that are part of this equation, that in the large, the sequence of events would be most likely that active forces would be those that would respond to the immediate crises and regional scenarios and that the implication of combat Reserve forces would be to deal with the

longer term, much larger conflict if we had indications of global warning, and which there is time for a build up.

Mrs. BYRON. Do we need to keep the Guard and the Reserve trained to a higher threshold in those combat unit than they are regularly trained to?

Admiral JEREMIAH. You have that choice, in the round outs, if you want to pay the price to do that, which you alluded to. But in the resources and scenarios that we can see into the future, or we are looking at into the future, a more likely role would be to take advantage of the warning time that we anticipate for a larger scenario and use them to round out the forces, the total forces, by increasing the number of available combat divisions.

Mrs. BYRON. As we look at the Reserve and Guard coming back into their home communities at a time where the economy is in a downturn in many areas, it is important, even mandated by law, that their jobs are there and waiting for them. If those jobs are not there and waiting for them, I think we are going to find a difficulty in keeping up that commitment to the Guard and Reserve.

I look at the number of medical units that have been called up where local communities have been stretched fairly thin and I think when we look at our Base Force concept and military strategy. I think we need to really examine a lot of the things that we have learned in the last 6 months, but we cannot examine just those without looking at a bigger picture.

Admiral JEREMIAH. I was an involuntarily called reservist myself in 1961 for a rather different scenario. We were called up for Berlin and went to Vietnam. I have considerable empathy with the Reserves who are now serving and are those who are going back to resume their civilian occupations.

My sense, in talking to the service chiefs as they talk to the individuals and employers around, is that the employers in general are extremely supportive of those Reserves who were taken to carry out these responsibilities and will look to their well being.

I think in some cases, particularly the youngsters who were in sort of the labor pool associated with construction and things like that, that they will potentially have—I think there is a little risk there but I think that the tremendous outpouring of support for the Active and Reserve forces involved in Operation Desert Shield/Desert Storm and the commitment that this country has made on the part of individual citizens to support the individual soldier, sailor, airman and Marine in this conflict, I think that is going to continue over into the reemployment of them in the work force.

Mrs. BYRON. I have no further questions. I do appreciate the two of you testifying before the committee for the extent that you have, and I am sure that they have questioned you on every conceivable concept of our total force structure.

So thank you once again.

Admiral JEREMIAH. Thank you, Madam Chairman.

Mrs. BYRON. The committee is adjourned.

[Whereupon, at 12:53 p.m., the committee was adjourned.]

TWENTY-FIVE PERCENT BUILD-DOWN—CBO ASSESSMENT

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, Tuesday, March 19, 1991.

The committee met, pursuant to notice, at 1 p.m., Rayburn House Office Building, Hon. Les Aspin (chairman of the committee) presiding.

STATEMENT OF HON. LES ASPIN, A REPRESENTATIVE FROM WISCONSIN, CHAIRMAN, HOUSE ARMED SERVICES COMMITTEE

The CHAIRMAN. The committee will come to order.

Before we begin the hearing, let me call on Bill Dickinson for a unanimous consent request.

STATEMENT OF HON. WILLIAM F. DICKINSON, A REPRESENTATIVE FROM ALABAMA, RANKING MINORITY MEMBER, HOUSE ARMED SERVICES COMMITTEE

Mr. DICKINSON. Mr. Chairman, we have two reprogrammings (fiscal years 1991-1995 PA and fiscal years 1991-1997 PA) that I have gone over with staff, and I am sure you are familiar with them, too. If the Chair would like, we can get an explanation of them, but the first has to do with a reprogramming to support the nuclear test treaty and the chemical warfare, biological agreement requirements. The agency that has the responsibility has been given two additional responsibilities that call for additional duties on our part. They are asking for \$28 million in sources.

Now wait a minute. This says for the M1 tank. Who is going to discuss this first one?

Mr. THOMPSON. I will discuss the source, Mr. Dickinson. One of the sources was for the M1 tank. At the same time, in the supplemental request there was \$26 million requested to plus-up the M1 tank, so the balance turned out to be zero, and it did not make sense to use this as a source then turn around and use it as a sink too.

Mr. DICKINSON. These are the two that we are refusing the request.

Mr. THOMPSON. That is one of the sources.

Mr. DICKINSON. The rest of it the staff felt was all right, is that right?

Mr. THOMPSON. Yes sir.

Mr. DICKINSON. I would ask unanimous consent then that we approve the reprogramming, Mr. Chairman.

Mr. KASICH. I would like to reserve the right to object. I have a hard time understanding why we should approve \$101 million in

reprogramming for all of this stuff when the Air Force wants to suspend the contract on fixing the B-1, which is \$300 million. I do not understand, as one of the staff guys said, this has been sitting in the drawer for several months. The B-1 has been sitting in the hangars for about 3 years. I just think we should not do it until we figure out what we are going to do with the \$300 million that is needed to fix that contract on the B-1.

Mr. DICKINSON. Is there a connection between this and the B-1?

Mr. KASICH. Mr. D, they said when they were up here testifying that they could not come up with the money. They did not have the money, and now it is going to cost, according to testimony last week, another \$150 million if they end the contract for the B-1. When Rice was up here, he said we do not have the money for it. Now they have a \$101 million reprogramming request before the committee. If we do not fix the B-1 and we stop the contract and come back and fix it, it costs another \$100 million.

Mr. DICKINSON. I did not mean to get into the B-1 issue because I am not familiar with it, but I know what this is for. Where is the money coming from? Does any part of this come out of B-1?

Mr. THOMPSON. No sir, not at all.

Mr. DICKINSON. How much money are we talking about in reprogramming for this nuclear test treaty?

Mr. THOMPSON. The aggregate, I think, is \$100 and some million.

Mr. DICKINSON. Let Ron tell us what this is and what it is for, and then if you do not want to—

Mr. BARTEK. The sum, Mr. Dickinson, is \$101 million, almost \$102 million. The requirement here is fairly clear. The On-Site Inspection Agency, which will be the ultimate recipient of this funding was originally established to conduct inspections for the INF Treaty. It has now been given two new accounts, the Nuclear Test Treaty, the protocols for inspection of which we have signed now; and the Chemical Weapons Bilateral Agreement with the Soviet Union, visits for which have already commenced.

So what this represents is the Department's attempt to provide the required money to this agency to conduct inspections and host Soviet inspections for treaty obligations already incurred by our Government.

Mr. KASICH. Mr. Chairman, could I ask a question? Mr. Dickinson, if you would yield.

Look, the simple fact of the matter is that yes, the money does not come out of Air Force accounts. What does that matter? The point is, if the Department of Defense decided that the B-1 was a top priority to fix, they would transfer the money into the B-1 program. Now Rice comes up here and he says we do not have \$300 million to fix the B-1. Then we switch \$100 million over to this stuff.

I am going to object to it and insist that we have a committee meeting on this and a vote. I think this is typical of the way in which they have handled this which is supposed to be a priority item, and this is insulting to us, I think.

The CHAIRMAN. All right, never mind. We will drop the program and let the Air Force worry about the problem. Thanks.

Mr. DICKINSON. There is a second one. This is a small amount of money, \$11 million. Do you want to object to that too?

Mr. KASICH. I am not sure what this one does, Mr. D. If it's for Operation Desert Storm then I guess we have to go forward with it.

Mr. DICKINSON. It is a countermeasure that was very much needed, that we need in inventory that is being manufactured that has to do with Desert Storm. It has to do with counter-artillery capability. It is \$11 million. Do you want to object to that?

Mr. KASICH. Mr. Dickinson, I do not mean to be a jerk about the first reprogramming.

Mr. DICKINSON. I know you cannot help it.

[Laughter]

Mr. KASICH. I do not mean to be one, but we come up here and listen to them cry wolf over they do not have any money and they want to reprogram \$100 million. I think it is terrible.

Mr. DICKINSON. All right, this \$11 million for counter-artillery weapon, and it is unanimous consent, and I am asking, they have identified the sources. It really comes out of ADATS, last year's unused money. I would ask unanimous consent that that be approved, Mr. Chairman.

The CHAIRMAN. Are there objections?

[No response]

The CHAIRMAN. Hearing none, it is approved. Thank you.

[The reprogramming agenda follows:]

HOUSE ARMED SERVICES COMMITTEE
TUESDAY, MARCH 19, 1991

REPROGRAMMING AGENDA

Page

<u>FY 91-5 PA</u>	<u>O&M, Defense Agencies, FY 1991; Procurement, Defense Agencies, FY 1991/1993; RDT&E Defense Agencies, FY 1991/1992; O&M, Army, FY 1991 (Includes transfers).</u> To transfer a total of \$101.9 million to various accounts to fund increases in support of the Nuclear Test Treaty and the Chemical Warfare Bilateral Agreement requirements.....	1
-------------------	--	---

Ron Bartek

<u>FY 91-7</u> (Classified)	<u>Other Procurement, Army, FY 1991/1993 (Includes transfers).</u> To transfer a total of \$11.2 million to Other Procurement, Army to realign funding for procurement of SHORTSTOP radio frequency countermeasure devices for use in connection with Operation DESERT STORM.....	N/A
--------------------------------	---	-----

Steve Thompson

Unclassified
CLASSIFICATION

Page 1 of 3 Pages

REPROGRAMMING ACTION									
Appropriation Account Title: O&M, Defense Agencies, FY 1991; Procurement, Defense Agencies, 91/93; RDT&I Defense Agencies, 91/92; O&M, Army, FY 1991 (Includes Transfers)							DoD Serial Number: FY 91-5 PA		
Component Serial Number: FY 91-1 PA		(Amounts in Thousands of Dollars)							
LINE ITEM	Program Base Reflecting Congressional Action		Program Previously Approved by Sec Def		Reprogramming Action		Revised Program		
	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	
a	b	c	d	e	f	g	h	i	
PRIOR APPROVAL ACTION									
<p>This reprogramming is submitted for prior approval because it involves the use of general transfer authority pursuant to Section 8007 of P.L. 101-511, the FY 1991 DoD Appropriations Act and Section 1401 of P.L. 101-510, the FY 1991 DoD Authorization Act. This action requests authority to transfer \$101.9 million to Defense Agencies' Operation and Maintenance, FY 1991; Procurement, Defense Agencies, 91/93; Research, Development, Test and Evaluation, Defense Agencies, 91/92 and Operation and Maintenance, Army, FY 1991 appropriations to fund increases in support of the Nuclear Test Treaty and the Chemical Warfare Bilateral Agreement requirements. The proposed sources of this action are from Procurement of Weapons and Tracked Combat Vehicles, Army, 91/93; Aircraft Procurement, Navy, 91/93; Aircraft Procurement, Air Force, 91/93 and Other Procurement, Air Force, 91/93 appropriations. This request is for higher priority items, based upon unforeseen military requirements, than those for which the funds were originally appropriated. It meets all administrative and legal requirements of the Congress and has not been denied by the Congress. This action will be reflected in the FY 1992/1993 President's budget.</p>									
REPROGRAMMING INCREASES:									
Operation and Maintenance, Defense Agencies, FY 1991									
On-Site Inspection Agency	31,280		31,280		+44,100		75,380		
<p>Explanation: These funds are required for civilian personnel, training, security efforts, technician services, site preparation, implementation of information management systems, outfitting aircraft, and expendable items in support of the Nuclear Test Treaty and the Chemical Warfare Bilateral Agreement. Specific requirements include inspection and escort responsibilities; U.S./Soviet living and working accommodations; movement of U.S. personnel and equipment into and out of the U.S.S.R., movement of Soviet personnel and equipment within the U.S.; monitoring equipment maintenance, inspection, "storage" and refurbishment; end yield measurement activities.</p>									
Procurement, Defense Agencies, 91/93									
On-Site Inspection Agency									
Other Capital Equipment	950		950		+16,700		17,650		
<p>Explanation: These funds are required for the procurement of production seismic equipment; locks and alignment tools; equipment associated with CORREX and hydrodynamic-plus; logging, coring, and survey equipment; end expendables such as cables, transducers and replacement parts.</p>									
Approved (Signature and Date)					Sean O'Keefe Comptroller, DcD				
<i>Sean O'Keefe</i> 1/19/91									

DD FORM 1415-1
7 May 90

Unclassified
CLASSIFICATION

Unclassified
CLASSIFICATION

Page 2 of 3 Pages

REPROGRAMMING ACTION								
Appropriation Account Title: O&M, Defense Agencies, FY 1991; Procurement, Defense Agencies, 91/93; RDT&E Defense Agencies, 91/92; O&M, Army, FY 1991 (Includes Transfers)						DoD Serial Number: FY 91-5 PA		
Component Serial Number: FY 91-1 PA		(Amounts in Thousands of Dollars)						
LINE ITEM	Program Base Reflecting Congressional Action		Program Previously Approved by Sec Def		Reprogramming Action		Revised Program	
	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
a	b	c	d	e	f	g	h	i
<u>PRIOR APPROVAL ACTION</u>								
<u>Research, Development, Test and Evaluation, Defense Agencies, 91/92</u>								
Defense Nuclear Agency								
0603711H Verification Technology Demonstration								
	76,000		76,000		+30,600		106,600	
Explanation: These funds are required to develop prototype HYDRD-PLUS equipment for training purposes, to satisfy familiarization protocol provisions end to deploy to the Soviet Union es needed. Funds ere also required to provide personnel to deploy to the Soviet Union, treining exercises, facilities for equipment storage end repeir, and a mission development program for hydrodynamic yield measurement technology. DNA is responsible for monitoring the Soviet nonstandard tests using the HYDRD-PLUS technique and supporting OSIA on ell nonstandard end horizontal underground tests.								
Defense Advanced Research Projects Agency								
0602714E Nuclear Monitoring								
	24,626		24,626		+5,900		30,526	
Explanation: These funds ere required to obtain engineering drawings for the DSS equipment, develop and procure three prototype DSS systems, test these systems, and develop standards end procedures for converting raw dete collected et the Soviet test sites into yield estimates.								
Total RDT&E, Defense Agencies, 91/92						+36,500		
<u>Operation and Maintenance, Army, FY 1991</u>								
Budget Activity 2: General Purpose Forces								
	7,778,591		7,778,591		+4,600		7,783,191	
Explanation: Provides funding for Chemical Warfare Bileterel Agreement requirements such es preparatory studies; trevel for initiel inspection of storage, destruction and production facilities; inspection end monitoring equipment; end testing.								
TOTAL REPROGRAMMING INCREASES						+101,900		
<u>REPROGRAMMING DECREASES:</u>								

Unclassified

The CHAIRMAN. The Armed Services Committee today continues its series of hearings to examine our national security requirements in the post-Cold War era. We are exploring the impact of two historic events, the decline of the Eastern Bloc threat and war in the Persian Gulf, on the way we do business in the defense establishment.

The relaxing of the Soviet threat last year prompted the Defense Secretary, Dick Cheney, to propose a 25 percent force structure reduction by fiscal year 1995. We have asked the Congressional Budget Office to examine how the build-down is embodied in the President's budget using five critical factors: force structure, readiness, the pace at which we reduce overhead, the rate at which we modernize weapons, and the resources we devote to research and development.

We are interested in exploring the policy assumptions underlying the administration's choices in these categories. For example, what are the implications of emphasizing the next generation of weapons while reducing basic research and development funds?

We are pleased to have as a witness today Mr. Robert Hale, the Assistant Director for National Security at the Congressional Budget Office. We look forward to hearing him on this and other questions.

Before we start with the testimony, let me call on Mr. Dickinson.

Mr. DICKINSON. Thank you, Mr. Chairman. I join in welcoming Mr. Hale to the Committee today.

Mr. Hale, 2 days ago the Chairman and I returned from a visit to Saudi Arabia, Kuwait, and southern Iraq where the evidence of the readiness of our forces and the quality of our military technology is readily apparent. The U.S. achieved its Desert Storm objectives at minimal cost in lives because the Congress and the Defense Department have shared a common longstanding belief, and that is that quality people, high military readiness, and modernized equipment were essential and therefore, affordable, as national priorities.

As we reshape our national security strategy, as well as the size and composition of the forces, we will make a critical error if we decide to forego quality people or adequate readiness or modern technology in order to save money.

Your testimony indicates that in the late 1990s and beyond, given current defense spending projections, there will not be enough money available to support the readiness of a smaller force and procure the modernized weapon systems now in research and development.

You suggest one way for DOD to solve this long term funding is to forego the benefits of the new generation of weapon systems, thereby saving as much as \$32 billion a year. Another option that you offer is to only selectively modernize.

To many, any option that saves money will appear almost irresistibly attractive, but to me, any proposition that eliminates modernization, or slows modernization, simply to achieve cost savings, is a devil's bargain that condemns our men and women to fight tomorrow's wars with yesterday's technology. That is a bargain I am not prepared to make. I think it is a bargain America cannot afford.

I am committed to a smaller defense structure with its attendant reduced costs. I am also committed to tough scrutiny on every

weapon system to ensure we get the best quality for the investment.

Quality is affordable. We learned that lesson in Desert Storm. Our goal must be to achieve a modernized defense structure that provides our soldiers weapons and equipment capable of dealing with the potential threats of the early 21st Century.

We thank you for your presence here, and we look forward to your testimony. Thank you, Mr. Chairman.

The CHAIRMAN. Bob, the floor is yours.

STATEMENT OF ROBERT F. HALE, ASSISTANT DIRECTOR, NATIONAL SECURITY DIVISION, CONGRESSIONAL BUDGET OFFICE; ACCOMPANIED BY DR. BILL THOMAS

Mr. HALE. Thank you, Mr. Chairman. I appreciate the opportunity to discuss the administration's proposed drawdown of the U.S. military forces and the associated budget reductions.

I have with me Dr. Bill Thomas who prepared much of our testimony. I have a prepared statement for the record. I will give you an oral summary.

These last few months have certainly been eventful times for the U.S. military. Recently, of course, the Nation's attention has been riveted on the war in the Middle East. At the same time, the administration has proposed the largest reduction in U.S. military forces since the end of the Vietnam War.

Like the administration's budget proposal, my testimony today will focus on the proposed reduction of forces. After a brief discussion of the overall budget proposal, I will analyze the details of the administration's plan in categories that have been proposed by the Chairman.

Let me turn first to the budget proposal. In 1992, as I think you all know, the administration proposes budget authority for the national defense function of \$290.8 billion rising to \$295.1 billion by 1995. You can see those numbers on the board over here to my left, the second line from the bottom.

Compared with funding for fiscal year 1990, the administration's proposed budget authority would be lower in real or inflation-adjusted terms by 13 percent in 1992 and by 22 percent by 1995. In other words, by 1995, the U.S. defense budget would be about one-fifth smaller in real terms than it was in 1990.

As you are all well aware, last year's budget agreement established limits on total defense budget authority and on total outlays in 1992 and 1993. The administration's proposed defense budget meets the limits on budget authority established in the agreement. By CBO's estimates, however, defense outlays would exceed the limits by about \$3 billion in 1992 and by a little less than \$1 billion in 1993. CBO's estimate of outlays exceeds the limits in budget authority primarily because we believe that the administration has inappropriately claimed certain reductions in outlays. These reductions are associated with the transfer of funds from the defense budget into intelligence agencies. I think this is probably an issue you are going to hear more about in the next few weeks.

Turning from these total dollars to some of the details of the administration's proposed fundings, we find some shifts in emphasis.

Unclassified data in the Future Years Defense Plan (FYDP) show that general purpose forces receive a significantly smaller share of DOD's declining dollars. By 1995, that share falls to 35 percent compared with 39 percent in 1990.

Strategic forces increase, but only slightly in share, if one uses the fairly narrow definition of strategic forces that is in the FYDP.

There are also shifts in the share that each service receives. The Army's share declines most sharply. Shares for the defense agencies grow sharply by just about as much as the Army declines, at least in part because of planned increases in funding for the Strategic Defense Initiative. Shares for the Navy and the Air Force change by lesser amounts.

I have told you what happens to defense dollars. Let me turn to why those dollars decline. One major reason is planned reductions in numbers of military forces. Under the administration's plans, the Army would experience the largest percentage reduction in major forces. It would experience a net reduction of eight divisions between 1990 and 1995. The Air Force tactical fighter wings would decrease from 36 in 1990 to 26 in 1995. There would be substantial cuts in Navy ships and in older, strategic forces.

These reductions in forces would allow the services to make significant cuts in military and civilian personnel. By 1995, the number of personnel on active duty and the number in the selective reserve would each be cut by about 20 percent. So for DOD as a whole, the cuts would leave the balance of active and reserve forces unchanged. In other words, no real change would occur in the total force policy as measured by numbers of people.

These proposed cuts in forces would affect the balance of conventional (that is, nonnuclear) air and ground capability between the United States and its principal adversaries. To measure the balance of air and ground forces, CBO has used scoring methods that attempt to take into account the quantity and the quality of weapons. The methods do not capture the effects of training, tactics, intelligence, and communications and other factors that, as we learned in Operation Desert Storm, can very much affect the outcome of a war. But the methods do allow us to illustrate the affects of the force reductions proposed by the administration.

The board to my left shows the results of CBO's analysis of NATO and Warsaw Pact ground forces. The pair of bars at the far left of the board compares NATO and Warsaw Pact capability in 1988, before the end of the Cold War. The red and green bar represents the Pact; the other bar represents NATO forces.

As you can see, the Warsaw Pact ground forces had an advantage of about 1.6 to 1.0 over NATO forces in 1988. With the dissolution of the Warsaw Pact, the Soviet Union can no longer count on its allies for military support. Thus, in assessing the balances of forces today, it is now more appropriate to compare NATO forces with those of the Soviet Union alone. That comparison shows rough parity of capability for ground forces between NATO and the Soviet Union, as you can see.

Now let us assume that the administration carries out its proposed force cuts and that our NATO allies make proportional cuts in their forces. In the absence of a CFE Treaty, the ratio also assumes that the Soviet Union makes no further cuts in its forces.

Under these assumptions, the Soviet Union would have an advantage of about 1.3 to 1.0 in ground forces. However, if the Soviets eventually carry out the large cuts required of them by the CFE Treaty, NATO would end up with an advantage of about 1.5 to 1.0.

These results suggest to me the importance of a CFE Treaty that is fully carried out by all the parties. Having the CFE Treaty means an advantage for NATO. No treaty would mean an advantage in ground capability for the Soviet Union.

CBO also analyzed the capability of tactical air forces.

The CHAIRMAN. Hold it. Before you leave, can you explain to me what the reserve, what are the U.S. forces composed of? Are those composed of the——

Mr. HALE. There are three components to that. The purple is active U.S. forces; the yellow——

The CHAIRMAN. In Europe.

Mr. HALE. These are forces that would fight in the central region in Europe, so they include Stateside forces that are assumed to be transported over there in the event of a major war.

The CHAIRMAN. In other words, what we are talking about is active and reserve units that are earmarked for NATO?

Mr. HALE. Yes, and that would include the great majority of our forces.

The CHAIRMAN. So how do you decide what to put in the chart there?

Mr. HALE. There is a certain arbitrariness in these efforts, but, for example, on the NATO bar, we include all of our active divisions except the one in the Pacific. So it is essentially all of our active forces except that one. It is more like two-thirds of the reserves. But even if the United States puts absolutely everything it had, the story would not fundamentally change.

The CHAIRMAN. Thank you.

Mr. HALE. CBO also analyzed the capability of tactical air forces. I will not discuss those results in detail. If you are interested in seeing them, they are on page ten of my prepared statement. They suggest that the balance of tactical aircraft is somewhat less favorable for the United States and its NATO allies than the balance for ground forces.

Finally, CBO made some comparisons of U.S. military capability, both before and after the administration's proposed force cuts, with potential adversaries other than the Soviet Union. To illustrate a wide range of potential adversaries, CBO analyzed Cuba, North Korea, and a large armored foe whose forces are patterned after those possessed by Iraq before the war. I do not have a board that discusses this. If you are interested, it appears on page 14 of my prepared statement.

CBO's results revealed one very clear and dramatic conclusion. Even after the administration's proposed force reductions, the United States would enjoy overwhelming advantages in tactical aircraft against almost any potential foe except the Soviets. For example, against our illustrative list of opponents, the U.S. advantage in the air would range from at least 4 to 1, to as much as 16 to 1.

As for ground forces, the United States would generally enjoy an advantage except against a large armed foe, such as one with Iraq's pre-war forces. The administration's planned force reductions

would exacerbate the U.S. disadvantage against a large foe in terms of quantity and quality of weapons. However, the overwhelming victory recently achieved in the Persian Gulf suggests that that disadvantage may be more than offset by factors other than numbers and quality of weapons, such as U.S. air superiority and allied contributions, as well as better training, tactics, logistics, and communications.

In sum, even after the administration's proposed cuts in forces, the United States and its allies could have important military advantages over a wide range of potential foes.

Let me turn from number of forces and their affects on military capability to another category proposed by the Chairman, the readiness of U.S. forces, and the associated topic of overhead.

DOD has stated that it has budgeted funds to maintain the readiness of U.S. military forces at current levels through 1993. Consistent with that decision, the real level of readiness-related spending is not to be reduced below the current level. Based on this assumption of constant readiness-related spending and the administration's proposed force cuts, CBO estimated the total spending for operating and support costs, which we define as funds for military personnel and operation and maintenance. CBO's estimates of total operating and support costs match those in DOD's budget quite closely, within about 4 percent. However, CBO's estimates match DOD's planned funding only when we assume proportional cuts in overhead costs. CBO's definition of overhead costs includes much of the expenses for the training and medical establishment, as well as many base operating costs and administrative services.

If changes in number of forces are small, little or no reduction in these overhead activities would be expected. Larger changes in forces, such as the administration proposes, should lead to reductions, though perhaps only after a lag of some years. However, CBO's estimates of operating costs in 1992 through 1995 match DOD's planned funding only when we assume that reductions in overhead are proportional to reductions in those operating costs more directly related to the units.

These proportional cuts in overhead, which the administration appears to assume, are desirable in one important respect. They avoid cutting the "teeth", if you will, of the defense establishment more than its "tail". But it may be difficult for the department to achieve proportional cuts in the next few years. It is hard to cut activities, such as base operations and medical services, at the same time you are reducing the number of units. CBO's analysis of the budgetary history of the Vietnam draw-down bears out this contention. During that draw-down between 1968 and 1974, DOD did not achieve proportional cuts in overhead-type activities.

If budgetary targets must be met and DOD has trouble achieving proportional cuts in overhead, there could be pressure for reductions in categories of spending more directly related to readiness and, hence, in readiness itself. Alternatively, there could be pressure for even larger cuts in forces than those proposed by the administration.

Next I would like to address the affects of the administration's defense program on modernization. In the long run, modernization is influenced by funding for research, development, test, and eval-

uation (RDT&E) projects that can increase the capability of the next generation of weapons. The administration is requesting a modest increase in RDT&E funding in 1992, much of it to pay for increased costs of research on the Strategic Defense Initiative. By 1995, however, real funding for RDT&E under the administration plan would be about 16 percent lower than in 1990.

Moreover, despite congressional guidance to establish a 2 percent annual real increase in basic research as a target, the administration proposes a real decrease of 6 percent in these categories between 1991 and 1992 (that is, specifically those in subcategories 6.1 and 6.2 of the RDT&E budget). That lower real level is maintained in 1993 and in later years.

Thus, there appears to be no strong emphasis on basic RDT&E in this budget proposal.

While R&D affects long-term modernization, the pace of modernization in the near term can be measured, at least crudely, by changes in the average age of weapons; measured by average age, trends in modernization through 1995 are mixed and depend on the type of weapon.

For example, most major categories of ships will be as or more modern in 1995 than they were in 1990. In contrast, Navy combat aircraft would steadily increase in average age between 1990 and 1995, and that same result would probably be true for major Army weapons.

These trends in average age are influenced both by retirements of old equipment and by purchases of new weapons. Faced with the need to reduce forces, the military services will generally chose to retire their oldest equipment first, which tends to make weapon inventories younger and, by this measure, more modern.

Offsetting that trend, DOD plans to buy only a very few new weapons over the next several years. As you can see on the board to the left, DOD plans to buy only nine ships a year on average between 1992 to 1995. Yet over a long period, DOD would need to buy about 14 ships a year, if it wanted to maintain the 1995 planned fleet of 451 ships at today's average age.

The situation is even more striking for Air Force fighter aircraft and Army tanks. On average, DOD plans to buy only 18 Air Force fighter aircraft a year between 1992 to 1995. To maintain the 1995 inventory of about 2,800 aircraft at roughly its current age, DOD would need, over the long run, to buy significantly more than 100 aircraft a year. Of course, DOD does not plan to buy any tanks at all between 1992 and 1995.

As these numbers suggest, DOD would accommodate budgetary limits on procurement by purchasing few new weapons and essentially living off its stock of existing weapons.

The CHAIRMAN. What are the numbers that you have to have in each of those columns to maintain that size and the current age?

Mr. HALE. I gave two examples. I am not sure that I have the other ones off the top of my head. Something on the order of 14 ships a year to maintain the 451; and something on the order of more than 100 Air Force fighter aircraft a year. I can get the other ones, if you like, for the record.

The CHAIRMAN. It would be interesting for us.

[The following information was received for the record:]

To maintain their stocks of equipment and avoid an increase in average age, the military services need to procure annually the following: 13 or 14 ships for a 451-ship Navy, about 140 combat aircraft for the Navy/Marine Corps inventory of 3,300 aircraft, 130 fighter aircraft for the Air Force inventory of 2,800 aircraft, and 210 tanks for the Army inventory of 6,300 tanks. These estimates are based on CBO assumptions for equipment service lives.

Mr. HALE. Sure. They would obviously be substantially higher than what we are planning to buy, clearly for tanks; and somewhat higher for Navy combat aircraft as well.

Essentially, DOD is living off its stock of weapons in this plan. The department can certainly do that, at least for a few years. Because of the large procurement budgets of the 1980s, DOD enters the 1990s with a substantial stock of relatively new equipment. Moreover, in some cases, the department has more weapons than it needs to equip the smaller forces it now plans to maintain. However, by living off its stock and buying few weapons, DOD may reduce the number of companies able to produce defense weapons, which could create problems in the industrial base when the time finally comes to buy weapons in larger numbers.

So far my testimony has analyzed the effects of the administration's defense plan for 1992 through 1995. Let me conclude with an analysis of the adequacy of long-term defense spending—that is, in the years beyond 1995.

CBO's analysis suggests that, even if the administration carries out its proposed force cuts, the planned level of real defense budget authority for 1995 will not be enough to support its smaller forces in the long run. The main problem is likely to be funding for procurement. CBO estimates that by the latter part of this decade and the early part of the next one, DOD will need to spend an average of about \$109 billion each year on procurement, even after it reduces its numbers of forces. You can see that figure, which is expressed in 1991 dollars on the board to my left—in the right hand column there.

This figure of \$109 billion represents about \$40 billion or two-thirds more than what DOD plans to spend on procurement in 1995, so we're talking about a significant mismatch between long-run needs and funding at the planned level for 1995.

Why is this mismatch so large? By the latter part of this decade, DOD will have to begin replacing its aging equipment. It wants to replace that aging equipment with weapons that are likely to be quite expensive, including the SSN-21 submarine, the C-17 aircraft, the B-2 bomber, the Advanced Tactical Fighter, and a replacement for the A-6 aircraft. These expensive weapons will result in sharply higher requirements for procurement dollars in the long term.

I want to emphasize that DOD will not have to spend \$109 billion in 1992, or even in 1995. The department can live off its stock for a number of years. But by the latter part of this decade or early in the next one, procurement budgets will have to rise sharply under currently planned policies.

DOD could pursue a number of policy changes in an attempt to hold down long-run procurement, but few seem likely to work. DOD could try to keep equipment longer, but CBO's analysis al-

ready assumes that DOD keeps its weapons to ages that are quite venerable—30 to 45 years in many cases.

DOD could also try to develop weapons that cost less to operate, substituting lower operating costs for higher procurement costs. However, at least in the past, more costly weapons have been associated with total operating budgets that are higher, not lower.

There is one policy, which Mr. Dickinson mentioned, that would resolve DOD's long-term funding problem. If the services elected to replace aging equipment with new weapons whose unit costs equal those of the current generation of weapons, then instead of \$109 billion a year, the average annual requirement for procurement funding would be about \$67 billion, as you can see on the board. That \$67 billion roughly equals the level of procurement funding planned for 1995, and the current level as well. Thus, keeping unit costs at the current real levels would eliminate the mismatch.

But if I could emphasize, such a policy is not a panacea because it would probably require DOD to forgo the benefits of a new generation of weapons, including much of the benefits of stealth technology.

Comparing the \$67 billion with \$109 billion does, however, dramatize the budgetary effect of choosing to modernize U.S. forces with the next generation of weapons. That is why CBO has done this calculation.

Mr. Chairman, CBO has examined the administration's proposed defense budget using the categories you proposed. I have covered a lot of ground quickly. Let me finish by restating a few key conclusions.

Between now and 1995, the administration's proposed defense budget should comply with limits set last year on defense budget authority, in part by maintaining a smaller number of forces. While trends in modernization among various categories of weapons would be mixed over this period, the remaining forces should be able to maintain current levels of readiness to the extent that DOD can achieve proportional cuts in overhead.

In the late 1990s and beyond, however, planned funds may not be adequate to support even the smaller number of forces, largely because of the high costs of new weapons DOD plans to buy. This finding emphasizes the importance of a choice that will be made, not in the late 1990s, but in the next few years. If DOD begins to procure all of the new weapons now proposed, production lines for the current generation of weapons will be closed. In that case, the choices for defense in the late 1990s and the early part of the next century may be simple: find substantially more funds, or accept much larger cuts in forces.

If those choices are not acceptable, then DOD and the Congress must be selective over the next few years about which new weapons are bought, and which older ones are not.

That concludes my oral statement, Mr. Chairman. I would be glad to try to answer any questions.

PREPARED STATEMENT OF ROBERT F. HALE

I appreciate the opportunity to discuss the Administration's proposed drawdown of U.S. military forces and the associated budget reductions. These last few months have been eventful times for the U.S. military. The nation's attention has been riveted on the war in the Middle East. At the same time, the Administration has proposed the largest reduction in U.S. military forces since the end of the Vietnam War. Like the Administration's budget proposal, my testimony today will focus on the proposed reduction of forces.

After a brief discussion of the overall budget proposal, I will analyze the details of the Administration's plan in categories proposed by the Chairman. I will first discuss changes in the number of U.S. forces, including the effects of those changes on the balance of military power between the United States and its potential adversaries. Next, I will talk about spending related to the readiness of U.S. forces and overhead activities. Finally, I will address the modernization of U.S. forces, including the near-term effects of the force reductions and the longer-run influence of spending on research and development.

The testimony reaches several conclusions:

- o The proposed cuts in forces should permit compliance with the limits on budget authority in last year's budget agreement.
- o From a U.S. perspective, the proposed cuts worsen the balance of military forces with potential adversaries, but those negative effects may be offset by other military advantages.
- o Trends in modernization among categories of weapons will be mixed between now and 1995. Remaining forces, however, should be able to operate at current levels of readiness for war if overhead activities can be reduced in proportion to other cuts in operating costs.
- o In the long run, substantial real increases in the U.S. defense budget would be required to modernize fully remaining U.S. forces with the new weapons now planned. To avoid budget increases, the Congress will have to be highly selective in choosing new weapons to be bought.

THE ADMINISTRATION'S DEFENSE BUDGET PROPOSAL

In 1992, the Administration proposes budget authority for the national defense function (function 050) of \$290.8 billion, rising to \$295.1 billion by 1995 (see Table 1). Compared with funding for fiscal year 1990, the year used

TABLE 1. THE ADMINISTRATION'S PROPOSED NATIONAL DEFENSE BUDGET FOR 1992 THROUGH 1995
(In billions of dollars of budget authority)

Category	Fiscal Year				
	1990	1991	1992 ^a	1993	1995
Department of Defense					
Military personnel	78.9	79.0	78.0	77.5	75.9
Operation and maintenance	88.3	86.0	86.5	84.7	85.7
Procurement	81.4	64.1	63.4	66.7	74.7
Research, development, test and evaluation (RDT&E)	36.5	34.6	39.9	41.0	37.5
Military construction	5.1	5.0	4.5	3.7	6.4
Other defense ^b	2.9	4.3	6.0	4.2	0.6
Total	293.0	273.0	278.3	277.9	280.7
Department of Energy	9.7	11.6	11.8	12.2	13.6
Other Defense-Related Activities	0.6	1.1	0.8	0.8	0.8
Total, National Defense (Budget Function 050)	303.3	285.6	290.8	290.9	295.1
Real Percentage Reductions ^c (Relative to 1990)	n.a.	-10	-13	-16	-22
Real Percentage Reductions ^c (Relative to 1991)	n.a.	n.a.	-3	-7	-13

SOURCE: Congressional Budget Office.

NOTE: Numbers may not add to totals because of rounding.
n.a. = not applicable.

a. Excludes a proposed transfer of \$165 million from procurement to RDT&E for the V-22 program.

b. Category includes family housing, revolving funds, and allowances.

c. Using CBO economic assumptions.

for comparison in last year's budget discussions, the Administration's proposed budget authority would be lower in real or inflation-adjusted terms by 13 percent in 1992 and by 22 percent by 1995.

While the overall budget declines, there is no shift in emphasis between operating and investment funds. (Investment funds include appropriations for procurement, research and development, and military construction.) The percentage of Department of Defense (DoD) funds allocated to investment is 42 percent in both 1990 and 1995.

The portion of the declining budget allocated to various defense missions shows more of a shift. Unclassified data contained in the Future Years Defense Program (FYDP) show that general purpose forces, which are the forces that fight most conventional wars, receive a significantly smaller share of the declining DoD dollar (down from 39 percent in 1990 to 35 percent in 1995). Intelligence and communications receives a larger share (up from 10 percent to 12 percent), as do the forces that provide airlift and sealift (2 percent to 3 percent). The share for strategic forces increases only slightly (from 6 percent to 7 percent) based on the Administration's narrow definition of the mission. The increase would be larger if, for example, the definition was broadened to include funding for the Strategic Defense Initiative.

The shares of the budget each military service receives also shifts. Between 1990 and 1995, the Army's share declines most sharply (from 27.0 percent to 24.6 percent). Smaller shifts take place in shares for the other services, downward in the Navy and upward in the Air Force. The share received by the defense agencies grows significantly (from 6.1 percent to 8.7 percent), in part because of increases in funding for the Strategic Defense Initiative.

Compliance with Budget Ceilings

For 1992 and 1993, the Administration's proposed defense budget meets the limits on budget authority established by the Budget Enforcement Act (BEA) of 1990. By CBO's estimates, however, defense outlays would exceed the BEA limits by about \$3 billion in 1992 and by less than \$1 billion in 1993.¹

CBO's estimate of outlays exceeds the limits primarily because we believe that the Administration has inappropriately claimed certain reductions

1. For further discussion, see *Analysis of the President's Budgetary Proposals for Fiscal Year 1992*, Congressional Budget Office (March 1991).

in outlays. Funds for some intelligence agencies are included in DoD's budget and are then transferred to the agencies. Before 1992, a transfer in budget authority was assumed to result in an outlay of the same amount in the first or budget year. However, the intelligence agencies apparently spend less than 100 percent of these funds in the first year. In 1992 and subsequent years, the Department of Defense has elected to use the lower spendout rates to estimate outlays associated with the transfers. This method reduces defense outlays, but it also raises outlays in other government accounts because the shift in spendout rates affects only intragovernmental transactions. In other words, the change does not result in any real savings to the government or any reduction in the government's borrowing needs.

CBO believes that, for purposes of meeting the BEA limits on outlays, this revision constitutes a conceptual change that is analogous to the change in accounting for federal credit programs. Under the BEA, such conceptual changes require an offsetting reduction in the outlay limit for defense. The Administration adjusted the limits for federal credit programs, but the limit on defense outlays was not reduced. Therefore, CBO believes it is inappropriate to claim the outlay reductions in the DoD budget.

In 1994 and 1995, the BEA does not set specific limits on the defense budget; instead, it sets limits on total federal discretionary spending. The Administration's proposed levels of defense budget authority, along with proposals for other types of spending, would meet these ceilings if the Congress approves the spending reductions the Administration recommends for domestic programs and international affairs. Under those recommendations, budget authority for domestic and international affairs in 1995 would be about 2 percent higher in real terms than its level in 1990, but about 8 percent below its 1991 level.

Would Smaller Force Cuts Permit Budgetary Compliance?

In recent testimony before the Congress, Secretary of Defense Cheney characterized the Administration's proposals to cut forces as a "good news" plan. The Secretary indicated that smaller reductions in forces could be necessary if the course of reform changed in the Soviet Union. The Secretary has also suggested that, unless cuts in forces are smaller than those now planned, the United States would have greater difficulty carrying out an operation like Desert Storm in the future.

Knowing exactly what a "bad news" plan might look like is impossible. It might just slow the currently planned reduction. Or it might lead to a decision to forgo part of the cut permanently.

To illustrate the budgetary consequences of a smaller reduction, CBO analyzed the savings from defense cuts that, in 1995, are roughly one-third smaller than those the Administration is now proposing. (Table A-1 in the Appendix to this testimony compares the smaller cut with the Administration's planned reduction.) In 1995, the annual operating savings stemming from the smaller reduction would be about \$12 billion less than those associated with the Administration's plan.

These smaller cuts in forces would also mean smaller reductions in military personnel. For example, between 1990 and 1995, the smaller cuts assumed by CBO would result in a reduction of only 14 percent in the number of active-duty military personnel, compared with the reduction of 20 percent under the Administration's plan.

Although not large as a percentage of the defense budget, a requirement for \$12 billion in extra operating funds would be difficult to accommodate within the limits set by the Budget Enforcement Act. The Administration could attempt to offset the increased operating costs by reducing spending for other defense activities, of which procurement is by far the largest. However, procurement spending has already been reduced significantly in recent years and may be difficult to cut further. Other categories of defense spending, such as research and development, are not large enough to absorb a reduction of \$12 billion without far-reaching changes in programs.

Additional defense spending in 1995 could also be accommodated by making larger reductions in spending for domestic programs and international affairs. If these nondefense activities were to absorb the reduction, by 1995 their real funding would be about 4 percent below the 1990 level and 13 percent below the level in 1991. Large cuts in nondefense spending might be just as difficult to achieve as would offsetting reductions in the defense budget.

In sum, the Congress may have limited flexibility in meeting the ceilings imposed by the Budget Enforcement Act. If the Administration or the Congress decide on cuts in forces that are significantly smaller than those now planned, they may well have to revise the ceilings upward.

REDUCTIONS IN THE NUMBER OF FORCES

The Administration's defense budget request proposes substantial reductions in the number of military forces between 1990 and 1995 (see Table 2). The Army will experience the largest percentage reduction in major forces. It

TABLE 2. PLANNED ACTIVE AND RESERVE MILITARY FORCES THROUGH FISCAL YEAR 1995

Forces	1990	1995	Percentage Reduction
Conventional Forces			
Army Divisions	28	20	29
Active	18	12	33
Reserve	10	6	40
Cadre	0	2	n.c.
Navy Ships	545	451	17
Carriers (Deployable)	13	12	8
Carrier air wings	15	13	13
Active Marine Corps Brigades	9	8 ^a	11
Air Force Tactical Fighter Wings	36	26	28
Active	24	15	38
Reserve	12	11	8
Strategic Forces^b			
Land-Based ICBMs	1,000	650 ^c	35
Sea-Launched Ballistic Missiles	608	496 ^c	18
Strategic Bombers, Total	291	210 ^c	28
Strategic Bombers (PAA) ^d	268	181	32

SOURCE: Statement of Secretary of Defense Cheney before the House Armed Services Committee (February 7, 1991), except as noted.

NOTE: n.c. = not calculable

- a. Reduction estimated by CBO to account for personnel reductions reported by the Department of Defense.
- b. Strategic forces in 1990 are based on data in the *Budget of the United States Government Fiscal Year 1992* (February 1991), p.85.
- c. Estimated by CBO.
- d. Primary aircraft authorizations.

plans to reduce the number of divisions in its active-duty forces from 18 in 1990 to 12 in 1995, while divisions in the part-time reserves will decrease from 10 to 6 over the same period. Air Force tactical fighter wings will decrease from 36 in 1990 to 26 in 1995. Nine of the ten tactical fighter wings eliminated from the Air Force come out of active-duty forces. Ships in the Navy's battle force will decline from 545 in 1990 to 451 in 1995. One brigade of Marine Corps forces (about 15,000 Marines) will be eliminated.

Reductions in strategic forces will also be made. CBO estimates that the number of strategic missiles based on land will be reduced by 35 percent between 1990 and 1995 as a result of the phasing out of the Minuteman II missile. However, land-based warheads would decline by only 14 percent. Missiles based on submarines will be reduced by 18 percent, while the total number of strategic bombers will fall by 28 percent.

These reductions in forces will allow the services to make significant cuts in military and civilian personnel. By 1995, the number of personnel on active duty and those in the selected reserve will each have been reduced by about 20 percent compared with numbers at the end of 1990 (see Table 3). The Army will experience the largest percentage reduction, losing 29 percent of its active personnel. Over the same period, the Air Force will experience a reduction of 19 percent, while Navy and Marine Corps personnel will decrease by 13 percent.

Personnel changes are the best common denominator we have for measuring reductions in all the services. By this measure, the Administration's proposed cuts in forces through 1995 represent a 20 percent cut from the 1990 level rather than the widely advertised reduction of 25 percent.

Effects of the Cuts on the Balance of Air and Ground Forces

The proposed cuts in forces will affect the balance of conventional (that is, non-nuclear) air and ground forces between the United States and its potential adversaries. This section focuses on air and ground forces because the reductions proposed by the Administration are largest in these categories and because relatively simple analytic techniques are available that permit us to assess the balance of such forces. This testimony does not analyze the effects of the Administration's proposed reductions on the balance of naval forces. Nor are naval and marine aviation forces included in the analysis of air forces.

In measuring the balance of air and ground forces, CBO used scoring methods that attempt to take into account both the quantity and the quality

TABLE 3. PERSONNEL REDUCTIONS PLANNED BY THE DEPARTMENT OF DEFENSE (In thousands of personnel)

DoD Component	End Strength in 1990 1995		Percentage Reduction
Army	751	536	29
Navy	583	510	13
Marine Corps	197	171	13
Air Force	539	437	19
Subtotal			
Active Forces	2,069	1,653	20
Selected Reserve Forces	1,128	906	20
Total, Active and Selected Reserve	3,197	2,559	20
Civilian Personnel	1,073	940	12

SOURCES: Department of Defense, "Fiscal Year 1992-93 Department of Defense Budget Request" News Release, February 4, 1991, and Department of Defense, *Manpower Requirements Report FY 1992* (February 1991).

of a nation's weapons. These methods do not take into account losses resulting from combat; rather, they estimate the capability of forces that would be available to each side during mobilization, before an attack begins. Nor do the methods capture the effects of training, tactics, logistics support, intelligence and communications, and other factors that influence the outcome of battles. These factors would generally favor the United States, especially when matched against countries other than the Soviet Union.

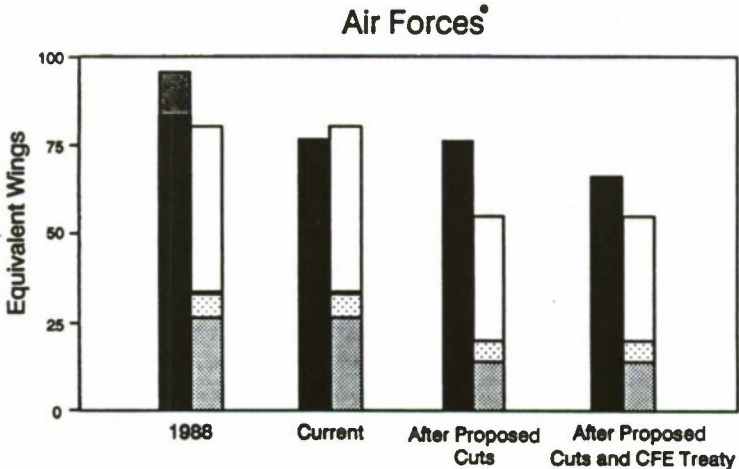
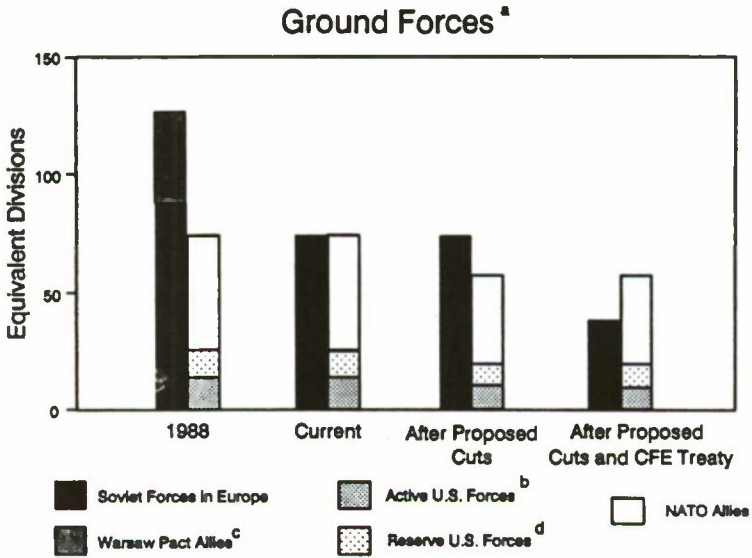
Operation Desert Storm provided clear evidence that factors such as training and tactics can contribute to overwhelming an opponent who, at least on paper, enjoys parity in terms of the number and quality of some types of weapons. No one, however, can predict with confidence the effects of factors such as training and tactics on future battles, let alone relate such factors to the Administration's proposed cuts in forces. Thus, the numerical results in this section focus on what we can predict—the numbers and quality of available weapons.

Comparisons with Soviet Union. The threat posed by the forces of the Soviet Union and its allies in the Warsaw Pact has shaped the size and structure of the U.S. military for the past four decades. Military conflict with the Soviet Union now seems unlikely, or would at least be preceded by a substantial period of warning. Nevertheless, the United States and its NATO allies will still probably want to consider Soviet capability in assessing proposed force reductions. Although the Soviet Union's social and economic problems may well have diminished the capability of Soviet forces, the assessments in this testimony ignore that decline because it is difficult to quantify and could be reversed.

Even after the Administration's proposed force reductions, the balance of capability for ground forces will be more favorable to the United States than it was in 1988, before the end of the Cold War. (These assessments of the capability of ground forces, which include the Army and other forces that would contest a land war, reflect only those forces that are expected to fight in Europe.) In 1988, the capability of the Soviet Union and its allies in the Warsaw Pact exceeded the capability of the United States and its NATO allies by a ratio of 1.6 to 1 for ground forces (see Figure 1). With the dissolution of the Warsaw Pact, the Soviet Union can no longer count on its allies for military support. Thus, in assessing the balance of forces today, it is most appropriate to compare NATO forces with those of the Soviet Union alone. That comparison shows rough parity of capability for ground forces.

The Administration's proposed cuts could reduce U.S. ground capability for NATO by about 25 percent below the current level. After these cuts, the ratio of the capability of Soviet ground forces to those of the NATO

Figure 1. Comparison of U.S. and NATO Forces with those of the Soviet Union and Its Allies



SOURCE: Congressional Budget Office.

NOTE: CFE = Conventional Force in Europe; CONUS = Continental United States.

a. Assumes full mobilization of U.S., Soviet, and other NATO forces.

b. Includes all forces in Europe plus reinforcements from CONUS.

c. The Warsaw Pact will no longer be a military alliance after March 31, 1991.

d. Includes all reinforcements from CONUS.

e. Excludes Naval and Marine aircraft.

allies could rise to about 1.3 to 1. This ratio assumes that our NATO allies make reductions in their forces proportional to those the United States makes, but that the Soviet Union makes no reductions in its ground forces beyond the cuts it has already made unilaterally. Although worse than today's balance of ground forces, this ratio would still be more favorable to NATO than the balance before the end of the Cold War.

Moreover, the Soviet Union may make some further reductions in its forces. Eventually, it might comply fully with the provisions of the Conventional Forces in Europe (CFE) treaty. That treaty has been signed but has not been submitted for ratification to the U.S. Senate because the Soviet Union insists on an interpretation of the treaty that none of the other 21 parties shares. Should the Soviet Union comply with the treaty as signed, it would have to destroy large numbers of its ground weapons. After the treaty was carried out, NATO's ground forces would enjoy an advantage over the Soviet Union of about 1.5 to 1, even if all of the Administration's proposed force reductions have been carried out.

Compared with ground capability, the balance of capability in the tactical air forces would be less favorable for the United States and its NATO allies. (Assessments of the capability of tactical air forces, which include the fighter and bomber aircraft that would attack enemy forces, encompass all those aircraft that are expected to fight in the region between the Atlantic Ocean and the Ural Mountains in the Soviet Union.) In 1988, before the end of the Cold War, the ratio of tactical aircraft capability between the Warsaw Pact and NATO was about 1.2 to 1 in favor of the Pact (see Figure 1). Currently, with the dissolution of the Warsaw Pact, a rough parity of capability in tactical air forces exists between the Soviet Union and NATO. The Administration's planned reductions could reduce U.S. tactical air forces for Europe by about 40 percent below its current level. If the NATO allies make proportional reductions in their air forces but the Soviet Union makes no reductions, then the Soviet Union would enjoy a substantial advantage over NATO of about 1.4 to 1.

Other factors, however, may offset this advantage. For example, if the Soviet Union were to comply fully with the CFE treaty, it would enjoy an advantage over NATO in tactical air forces of only about 1.2 to 1. Moreover, the ratios do not include naval and marine aircraft, a category where NATO would have an advantage. Also, some Soviet aircraft that are included in CBO's comparisons may not be used to oppose NATO forces. Many Soviet aircraft, while capable of opposing allied forces, are configured to defend the Soviet homeland and so might be kept out of any offensive action.

These balances of forces may suggest why some policymakers are cautious about carrying out all of the Administration's proposed reductions in forces. If the Soviet Union does not make substantial force reductions, the cuts the Administration proposes—coupled with cuts by the NATO allies—could leave the Soviet Union with some military advantages over NATO, particularly in tactical aircraft. If the Soviet Union were once again to become aggressive in its use of military forces, those advantages could be worrisome.

However, the analysis in this section makes assumptions that may significantly overstate the Soviet Union's advantages. For example, NATO's forces may be better trained and enjoy superior logistical support, factors that are not captured in these ratios. More important, the analysis assumes that Eastern European nations would remain neutral in any future conflict. Some of these nations, however, have indicated a desire to join NATO and might fight on NATO's side in any future war. Factors such as these may offset, perhaps more than offset, any Soviet advantages.

Comparisons with Other Nations. Although Soviet forces still pose the largest military threat to the United States, most analysts agree that war with the Soviet Union is unlikely. A conflict with some other country may be much more likely. Thus, this testimony compares U.S. military capability, before and after the Administration's proposed force cuts, with the capability of three potential adversaries other than the Soviet Union: Cuba, North Korea, and a large armored foe.

We selected the three potential adversaries to illustrate a wide spectrum of potential opponents. The comparison with Cuban forces is included to illustrate U.S. capabilities against potential threats closer to our own country. The United States is committed by treaty to the defense of South Korea from its northern neighbor. In assessing capabilities against North Korea, we assume that all the forces of South Korea fight with the United States. The large armored foe, which is assumed to have forces similar to those of Iraq before the war, is included to illustrate how U.S. military capability would compare against a heavily armed nation in the Middle East or elsewhere. (Table A-2 in the Appendix shows the key forces of various heavily armed nations.) While no obvious adversary has this capability, it is prudent to assess the effects of the proposed force cuts against a well-armed foe other than the Soviet Union. Because of uncertainty about the presence of allies, none is included in assessing U.S. capability against this large adversary.

A comparison of the capabilities of U.S. forces against those of other nations reveals one clear conclusion. Even after the Administration's

proposed reductions in forces, the United States would enjoy overwhelming advantages in tactical aircraft over all three potential foes. After U.S. reserve forces had been called up, the ratio of capability would range from 4 to 1 against the large armored foe to 16 to 1 against Cuban forces (see Figure 2, which notes the U.S. forces that are assumed to be pitted against each of the potential adversaries). Ratios of capability would still heavily favor the United States, even if reserve air units were not called up. Nor do these ratios capture the effects of the superior training of U.S. pilots, which means that the United States has an even greater advantage.

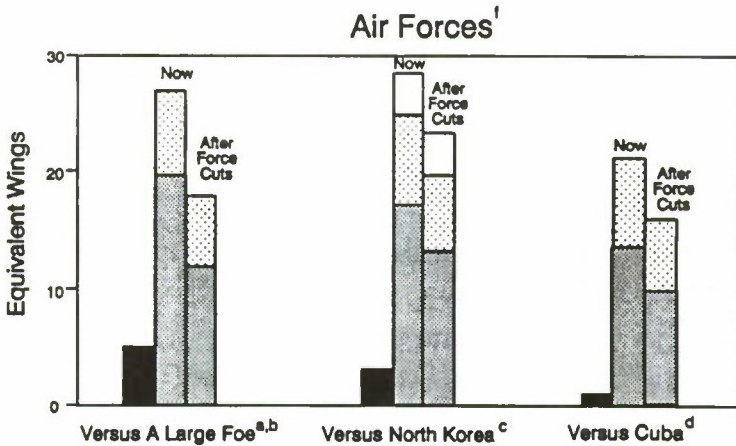
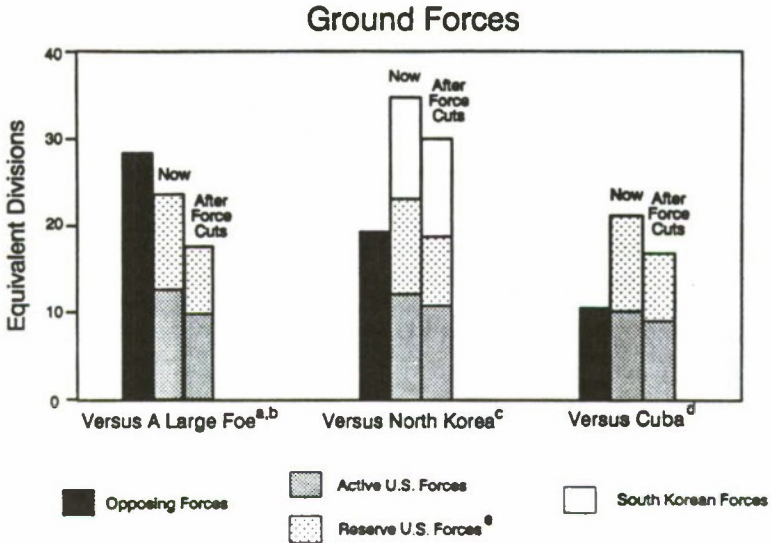
On the ground, the effects of the force cuts on U.S. capability against these three potential adversaries would vary more widely than is the case for air forces. Against the relatively small Cuban military, those U.S. ground forces that are on active duty and might reasonably be used in such a conflict would be roughly equivalent in capability to Cuban forces, even after the Administration's proposed cuts in forces. (CBO assumes that about two-thirds of all U.S. ground capability on active duty would be available for a Cuban conflict.) Adding in U.S. reserves would provide the United States a substantial advantage.

The story would be similar in a conflict against North Korea. South Korean forces, coupled with those U.S. forces that are on active duty and that might reasonably be used in such a conflict, would match the ground forces of North Korea even after the Administration's force cuts. (CBO assumes that about three-quarters of all U.S. ground capability on active duty would be available for a Korean War.) Adding in U.S. reserves would provide the United States and South Korea with a substantial advantage.

Against a country with the forces of the large foe, the United States would face some disadvantages on the ground. The U.S. ground forces likely to be used in such a conflict, including both reserve and active forces, would be at a modest disadvantage today (about 1.2 to 1) and a somewhat larger disadvantage after the Administration's proposed cuts in forces (about 1.6 to 1). Before adding the reserves, U.S. ground forces could be outnumbered even more heavily, by more than two-to-one today and by almost three-to-one after the force cuts.

These disadvantages against a large foe, which is patterned after the forces Iraq possessed before the war, are clearly not consistent with the overwhelming military victory achieved during Operation Desert Storm. The ratios, however, capture only the effects of the number and quality of weapons. The ratios do not reflect important assistance that the United States received from its allies. Nor do the ground ratios reflect the military advantage the extensive air campaign conferred. Finally, the ratios do not

Figure 2. Comparison of Illustrative U.S. Force Deployments to Various Theaters with those of Other Countries



SOURCE: Congressional Budget Office

NOTE: CONUS = Continental United States.

a. Based on the equipment holdings of pre-war Iraq.

b. Includes one-half of U.S. forces in Europe plus reinforcements from CONUS.

c. Includes U.S. forces in the Pacific plus reinforcements from the CONUS

d. Includes U.S. forces in Panama plus reinforcements from CONUS.

e. Includes U.S. reinforcements from CONUS.

f. Excludes Naval and Marine aircraft.

reflect the coalition's apparently superior military training, logistics, intelligence, communications, and tactics.

In sum, even after the Administration's proposed cuts in forces, the United States and its allies would have important military advantages over a wide range of potential foes, particularly in the air. Against a large foe, such as one with Iraq's prewar forces, the planned force reductions would slightly exacerbate the U.S. disadvantage on the ground. However, the overwhelming victory recently achieved in the Persian Gulf suggests that disadvantage may be more than offset by factors other than numbers and quality of weapons.

Effects on Balance of Strategic Forces

Today, the strategic nuclear forces of the United States and the Soviet Union are roughly in balance. The United States has a slight edge in the number of strategic warheads, roughly 13,000 warheads compared with about 11,000 warheads in the Soviet Union's arsenal. The United States has an advantage in that its warheads are generally more accurate. But Soviet missiles have the capability to launch larger payloads.

This rough balance of strategic forces should be preserved even after the Administration's proposed force reductions. By the year 2000, the reductions would cut the number of U.S. strategic warheads by about 20 percent. The reduction in warheads would be slightly larger during the period before the procurement of the B-2 bomber was completed. If the United States and the Soviet Union agree to and carry out the provisions of the Strategic Arms Reduction Talks (START) treaty that is now being negotiated, the Soviet arsenal of warheads should be reduced by at least as much as the U.S. arsenal.

Even if the START treaty is not carried out, the Administration's proposed reductions would still leave the two sides with roughly equal numbers of warheads. Without START, however, the Soviet missiles would retain the advantage of launching larger payloads. With or without START, new forces being deployed by both sides will be better able to survive an enemy attack, which should enhance stability during a period of crisis.

READINESS AND OVERHEAD

Readiness of military forces can be defined as the ability to fight well early in a war. If U.S. forces are to be reduced in number, it is particularly important that those forces that remain on active duty be ready to fight quickly in the event of war.

The Department of Defense states that it has budgeted funds to maintain the readiness of U.S. military forces at current levels through 1993. Consistent with that decision, spending on training, maintenance, and other readiness-related accounts is to be kept high enough to maintain current levels of key measures of readiness—such as training days for Army units, flying hours for Navy and Air Force aircraft, and steaming days for Navy ships. The overall mix of active-duty and reserve personnel is not changed between 1990 and 1995, which also suggests that readiness will not change.

Though DoD plans no reductions in readiness-related spending, readiness may still fall temporarily. During the next few years, DoD plans to eliminate roughly one in five military units. To carry out these cuts, forces will have to be reorganized and moved to permit the closing of military bases. Some of those active and reserve units that remain in the force will receive new equipment from units that are deactivated. The turmoil associated with these many changes may well temporarily reduce readiness.

CBO Estimates Are Consistent With Constant Readiness Spending

CBO's estimates of operating costs are consistent with the assumption that readiness-related spending does not change. CBO estimated the cost of operating the Administration's planned forces in 1992 through 1995. We assumed that readiness-related spending for each major type of military unit remained roughly constant at its real level in 1989. (1989 was the last complete fiscal year before the beginning of the reductions in forces that make it difficult to identify budgetary relationships.) CBO's estimates of operating and support costs (which we define as funds for military personnel and operation and maintenance) are within about 4 percent of DoD's planned spending, both spending in 1995 and total spending in the 1992 through 1995 period. Given the inevitable errors in estimation, these are not significant differences.

However, CBO's estimates of operating costs match DoD's planned funding only when we assume proportional reductions in all categories of operating and support costs, including so-called "overhead" costs. Some portions of operating and support costs, such as the pay for personnel in military units and the cost of fuel used in unit training, can be related directly to the number of units. Other portions—for example, parts of the medical and training establishment—can also be related to the number of units in the military, though only indirectly. The remainder of operating and support costs tend not to respond to changes in the number of units. These activities, which CBO terms overhead, include much of the training and medical establishment as well as many administrative services and many of the activities that provide central supply and maintenance services. If changes in numbers of forces are

small, little or no reduction in these overhead activities would be expected. Larger changes in forces, however, suggest eventual reductions. CBO's estimates of operating costs in 1992 through 1995 match DoD's planned funding only when we assume that reductions in overhead are proportional to reductions in the direct and indirect categories of operating costs.

This assumption of proportional reductions in overhead seems consistent with DoD's future-year plans. Between 1990 and 1995, the total dollars in the three DoD budget programs that are most closely related to overhead (training and medical, central supply and maintenance, and administrative costs) are reduced roughly in proportion to cuts in the overall budget.

Proportional Cuts in Overhead

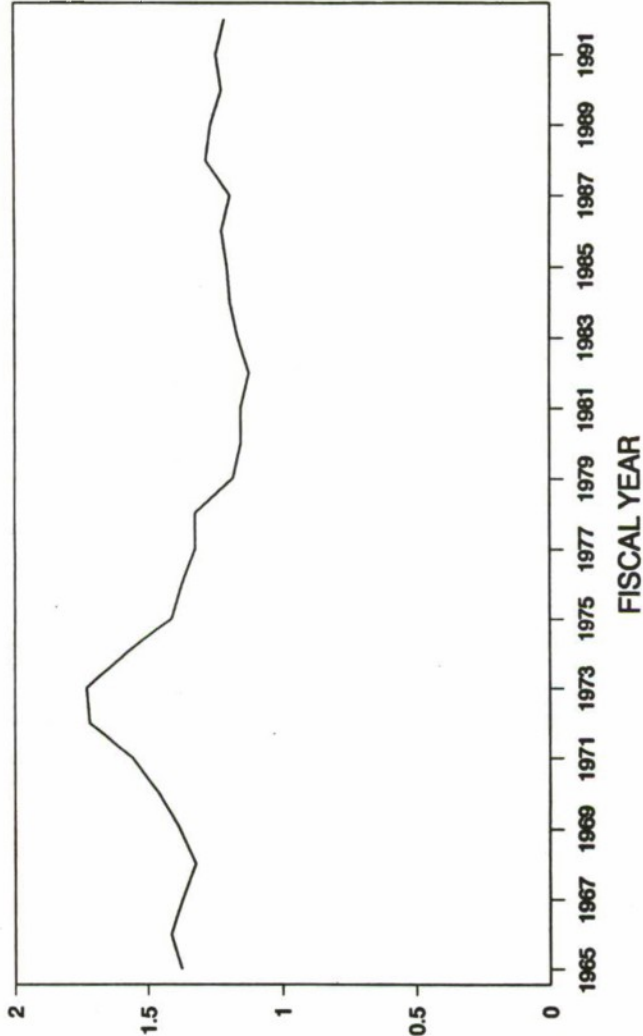
Proportional cuts in overhead are desirable in that they avoid cutting the "teeth" of the defense establishment more than its "tail." However, proportional reductions in overhead may be difficult to achieve in the next few years. If budgetary targets must be met, this difficulty could lead to reductions in categories of spending more directly related to readiness and, hence, in readiness itself.

The budgetary history of the Vietnam period suggests the difficulty of achieving proportional cuts in overhead quickly. After the peak of the Vietnam War, forces and personnel were reduced; active-duty personnel levels fell from a peak of 3.5 million in 1968 to a level of 2.2 million in 1974. As Figure 3 shows, in the early years of this reduction, support costs rose sharply in relationship to the direct costs of strategic and tactical forces. (Support costs in Figure 3 include both overhead and some indirect categories of expenses.) It took about seven years for the ratio to return to its pre-reduction level. Thus, if history is a guide, DoD will have trouble achieving proportional reductions in overhead by 1995.

Some categories of overhead spending may be difficult to reduce at all, let alone proportionally. For example, the Congress has expressed reservations about making any cuts in the military medical establishment, which makes up an important portion of overhead funding.

Of course, the Department of Defense may be able to achieve substantial efficiencies in its operations that will help it meet its budget targets for operating costs. Indeed, the Department has stated that it is seeking such efficiencies by carrying out the recommendations of its Defense Management Review. In the past, however, DoD has had difficulty achieving large dollar reductions through efficiencies.

Figure 3. Ratio of Support Costs to Operating Costs for Strategic and Tactical Forces



SOURCE: Congressional Budget Office

Note: Support Costs include both indirect costs of forces, as conventionally defined, and overhead costs not attributable to individual force elements

MODERNIZATION

How does the Administration's defense program affect the modernization of U.S. military forces? Modernization is important because newer weapons are generally more capable, and future U.S. weaponry may be pitted against modernized enemy weapons.

Research and Development: Key to Future Modernization

In the long run, modernization is influenced by funding for research projects in new technologies that can increase the capability of the next generation of weapons. The Administration is requesting research, development, test, and evaluation (RDT&E) appropriations totaling \$40 billion in 1992. The request for 1992 represents a real increase of only 1 percent compared with funding in 1990. Growth is not sustained in the years beyond 1992. By 1995, real funding for RDT&E under the Administration plan would be 16 percent below its 1990 level. Moreover, much of the growth in 1992 pays for increased funding for one program—the Strategic Defense Initiative (SDI). Funding requested for SDI is \$4.6 billion in 1992, compared with \$2.9 billion the Congress appropriated in fiscal year 1991.

Despite Congressional guidance to establish a 2 percent real increase in basic research as a target, the Administration did not propose real increases in funding for the technology base in either 1992 or 1993. Indeed, funds for basic research and exploratory development (that is, those in subcategories 6.1 and 6.2) would actually decrease in real terms by about 6 percent in 1992 and remain at that lower level in 1993.

As reflected in the above budget trends, DoD's priorities are unlikely to contribute significantly to the national goal of increasing productivity in U.S. industry. Spending on defense research and development represents about one-half of the federal government commitment to R&D, which will total about \$76 billion in fiscal year 1992. However, 90 percent of DoD spending for R&D pays to develop weapons, not to engage in basic research, and much of the technology is classified. Thus, this spending may do little to promote general advances in U.S. industrial productivity or to develop new products to enhance U.S. competitiveness. Nor does most of DoD's R&D budget do much to offset the funding advantages some U.S. competitors enjoy. Measured relative to the size of their economies, other major industrial nations, such as Japan and Germany, spend about 50 percent more on nondefense R&D than does the United States.

Near-Term Trends in Modernization

The pace of modernization in the next few years can be measured by changes in the average age of weapons. Changes in average age suggest changes in the proportion of weapons that have newer and, usually, more capable designs. Average age is certainly not a perfect measure of capability. An ideal measure would compare the abilities of U.S. weapons with the enemy threats they might face. However, average age provides a reasonable index of modernization and the improved capability that often goes with it.

Measured by average age, trends in modernization are mixed between now and 1995, depending on the type of weapon. Most categories of ships will be as or more modern than they were in 1990 (see Table 4). Major surface combatants and attack submarines decline or remain constant in average age; submarines carrying ballistic missiles are, on average, 7 years younger. As a result of older aircraft being retired, tactical aircraft in the Air Force decline sharply in average age by 1993, from 10 years to 8 years. By 1995, however, the average age of these aircraft returns to approximately its 1990 level. (These and other conclusions in this section reflect CBO's understanding of DoD's plans for retiring older weapons and buying new ones. The results might change somewhat as more information becomes available.)

In contrast to ships and Air Force aircraft, the average age of Navy combat aircraft rises steadily between 1990 and 1995, from 12 years to 15 years. CBO does not have detailed data on Army equipment. However, the average age of the Army's tanks, fighting vehicles, and helicopters will probably grow considerably between now and 1995.

Both purchases of new equipment and retirements influence these trends in average age. Faced with the need to reduce forces, the military services will generally choose to retire their oldest equipment first, which tends to make weapon inventories younger and more modern. Over the 1992-1995 period, for example, the Navy is likely to remove from its active forces all of the remaining James Madison and Benjamin Franklin class ballistic missile submarines (retaining only the 18 Ohio-class Trident submarines), nearly all its Knox class frigates, older Adams and Farragut class guided-missile destroyers, and its four modernized battleships. Surviving remnants of the older generation of aircraft will also be retired.

While retirements tend to make U.S. military equipment more modern, cuts in the procurement of new weapons have just the opposite effect. In its last two budget proposals, the Administration has proposed terminating at least 20 major acquisition programs. In addition, it has proposed sharp reductions in the rates of production for other programs, including the F-16

TABLE 4. AVERAGE AGES FOR SELECTED MILITARY EQUIPMENT

Equipment	1990	1993	1995
Air Force Tactical Aircraft	10	8	10
Navy Combat Aircraft	12	13	15
Naval Surface Combatant Ships	15	13	14
Attack Submarines	14	14	14
Ballistic Missile Submarines	18	15	11

SOURCE: Congressional Budget Office based on Department of Defense data.

and F/A-18 aircraft. For some major categories of weapons—particularly Army tanks and Air Force tactical aircraft—these decisions mean that DoD's proposed levels of procurement represent only a tiny fraction of its inventory requirements, even after the planned cuts in forces (see Table A-3 in the Appendix for details).

This sharp diminution of orders for weapons could reduce the number of companies producing equipment for the military. Loss of DoD business will affect most heavily the major firms that specialize in producing military equipment and weapons and the smaller firms that support their activities. The Administration, for example, plans to close five of the 13 active ammunition plants by 1993. Two factors could, however, serve to cushion the impact of the reductions. The first is the substantial backlog of orders that still remain. At the end of fiscal year 1990, \$136.3 billion in DoD procurement obligations remained unspent and another \$32.4 billion in funds were yet to be obligated. The second factor is sales of military equipment to foreign markets. In the wake of the invasion of Kuwait, Saudi Arabia ordered some \$7.5 billion in equipment, and total sales to that country may amount to some \$21 billion. Additional sales to other nations may result from the exemplary performance of U.S. weapons in conflict.

Despite the potential for negative effects on some defense companies, the sharp cutbacks in procurement may be quite consistent with the situation facing the Department of Defense. As a result of the large procurement budgets of the 1980s, DoD entered the 1990s with a substantial stock of relatively new equipment. Moreover, procurement programs in the 1980s were designed to meet the needs of military forces significantly larger than DoD now plans. Thus, the military services have more of many items of equipment than they need to equip forces, and can afford to terminate or slow procurement programs for the next few years to accommodate budgetary pressures.

Sharp procurement cutbacks, however, will in some cases more than offset the effects of reductions in forces and the retirements of older weapons that accompany them. Thus, by 1995 several categories of DoD weapons will not only be fewer in number but also less modern.

ADEQUACY OF DEFENSE FUNDING IN THE LONGER RUN

So far, this testimony has analyzed the effects of the Administration defense plan for 1992 through 1995. Those will be years of transition and turmoil for the defense establishment as it seeks to accommodate lower budgets and smaller forces. Will this period of turmoil end in 1995?

Perhaps not. Our analysis suggests that, even if the Administration carries out its proposed cuts in forces, the level of real defense budget authority the Administration proposes for 1995 will not be enough to support the smaller forces in the long run. The main problem is funding for procurement. Between now and 1995, and perhaps for some years after 1995, DoD can hold down spending on procurement by living off the stock of equipment it acquired in the 1980s. Eventually, however, the equipment bought in the 1980s and in earlier years will wear out and require replacement.

CBO estimates that, in the long run, the average annual funding required to replace this aging equipment would amount to about \$109 billion in 1991 dollars (see Table 5). Demands for substantially higher procurement funding would most likely occur in the late 1990s or the early part of the next century. At that time, the average annual level of required funding could exceed the amount the Administration plans to spend on procurement in 1995 by more than \$40 billion. Long-term requirements for procurement funding are large because the Administration plans to buy the new and much more expensive generation of weapons now in development or the early stages of procurement. These new weapons include the SSN-21 submarine, the C-17 aircraft, the B-2 bomber, the Advanced Tactical Fighter, a replacement for the A-6 aircraft, and replacements for the M-1 tank and Bradley Fighting Vehicle.

These estimates of annual procurement funding are based on numerous assumptions. Estimates depend critically on how long equipment can be maintained in the DoD inventory. CBO has made assumptions based, wherever possible, on recent experience with planned or actual retirements. These assumptions imply quite lengthy service lives, ranging up to 46 years for some ships and aircraft (see Table A-4 in the Appendix for selected examples of the service lives assumed in this analysis). CBO also had to make assumptions about the cost of the new generation of weapons. These assumptions are based on the latest available information about expected costs. In the case of the Army, which is just beginning to develop a new generation of weapons, CBO assumed an average annual real growth in costs of about 3 percent a year. Finally, CBO made explicit estimates about funding required to pay for major weapons. For more minor weapons and support systems, where detailed data are not available, CBO assumed that long-term levels of real funding maintained the same relationship with major procurement as has been the case in the recent past.

DoD could attempt to avoid its long-term budgetary problems by altering various policies. It might, for example, attempt to maintain weapons in its inventory even longer than CBO assumed in its analysis. However, this

TABLE 5. ESTIMATED ANNUAL PROCUREMENT COST TO MAINTAIN
1995 FORCES OVER THE LONG RUN
(In billions of 1991 dollars)

Service	With Current Equipment ^a	With Modernized Equipment
Army	17	26
Navy and Marine Corps	23	42
Air Force	26	39
Total, Military Services	66	106
Defense Agencies	2	3
Total, Department of Defense	67	109

SOURCE: Congressional Budget Office.

NOTE: Details may not add to total because of rounding.

- a. Alternately, replacement weapons could be new versions that have the same unit costs as current weapons.

analysis already assumes lengthy service lives. DoD might also be able to develop new weapons that cost less to operate, thereby offsetting higher procurement costs with lower costs for operations and support. Lower operating costs are often a goal in the design of new weapons, and DoD has succeeded in developing new weapons that require fewer people and funds to pay for direct operating costs.

However, the history of the relationship between procurement and total operating costs (including not only direct operating costs but also indirect costs and overhead) is discouraging. During the years between the mid 1970s and the latter part of the 1980s, total operating and support costs have often tended to increase with the overall value of DoD's stock of weapons. Thus, in the past, more costly weapons have been associated with total operating budgets that are higher, not lower.

To offset higher procurement costs, DoD could also attempt to reduce categories of spending other than operating and support costs. These other categories are, however, relatively small. Moreover, some of them have already been cut substantially. For example, during the early 1990s funding for military construction, which pays for new buildings and other physical structures, will be at its lowest real level since the early 1970s.

DoD may also be able to find less costly ways to provide adequate national security, perhaps based on the lessons of the current war. Increased use of smart munitions may represent one such approach. According to press reports, the performance of some U.S. munitions has been outstanding during Operation Desert Storm. By focusing research efforts on improving munitions rather than on improving the more costly ships, aircraft, and tanks that deliver the munitions, it may be possible to hold down procurement costs. Such a policy, however, requires difficult and uncertain choices between cost and military capability that are not likely to be made quickly.

One policy could resolve DoD's long-term funding problem. If the services elected to replace aging equipment with the current generation of weapons, or with replacement weapons that cost the same as the current generation, then instead of \$109 billion the average annual requirement for procurement funding would be about \$67 billion—roughly the level of procurement funding planned for 1995, expressed in 1991 dollars. Of course, such a policy is no panacea because it would require DoD to forgo the benefits of the new generation of weapons. Comparing the \$67 billion with the \$109 billion does, however, dramatize the budgetary effect of choosing to modernize U.S. forces with the next generation of weapons.

CONCLUSION

We have examined the Administration's proposed defense budget using the categories proposed by the Chairman. Between now and 1995, the Administration's proposed defense budget should comply with limits on defense budget authority, in part by maintaining a smaller number of forces. While trends in modernization among various categories of weapons would be mixed, the remaining forces should be able to maintain current levels of readiness if overhead can be cut in proportion to reductions in other categories of operating costs.

In the late 1990s and beyond, however, funds may not be adequate to support the smaller number of forces, largely because of the high cost of the new equipment DoD plans to buy. This finding emphasizes the importance of a choice that will be made, not in the late 1990s, but in the next few years. If DoD begins to procure all of the new weapons now proposed, production lines for the current generation of weapons will be closed. In that case, the choices for defense in the late 1990s and the early part of the next century may be simple: find substantially more funds or accept much larger cuts in forces. If those choices are not acceptable, then DoD and the Congress must be selective over the next few years about which new weapons are bought and which older weapons are not.

APPENDIX A. TABLES

TABLE A-1. ILLUSTRATION OF SMALLER FORCE CUTS

Force	Cuts by 1995	
	Smaller Cut	Administration's Proposed Cuts
Army Divisions		
Active	4	6
Reserve	3	4
Navy Ships	63	94
Marine Corps Brigades	0	1
Air Force Active Tactical Fighter Wings	7	9

SOURCE: Congressional Budget Office based on Department of Defense data.

TABLE A-2. ARMED FORCES OF VARIOUS NATIONS

Adversary	Tanks	Ground Troops (In thousands)	Combat Aircraft ^a
Soviet Union (Forces in Europe)			
1988	38,100	2,200	7,600
Current	20,694	1,960	6,445
Post CFE Treaty	13,150	n.a.	5,150
China	7,750	2,300	5,070
Large, Heavily Armored Foe ^b	5,500	955	607
Syria	4,000	300	634
North Korea	3,500	1,000	796
Cuba	1,100	145	191

SOURCES: Congressional Budget Office based on The International Institute for Strategic Studies, *The Military Balance 1990-1991* (London: IISS 1990) and Congressional Budget Office, "Budgetary and Military Effects of a Treaty Limiting Conventional Forces in Europe" (September 1990).

NOTES: n.a. = not available.

CFE = Conventional Forces in Europe.

a. Excludes naval and marine aircraft, but includes trainers capable of combat that are assigned to air forces.

b. Based on the forces available to Iraq before Operation Desert Storm.

TABLE A-3. COMPARISONS OF EQUIPMENT LEVELS AND PLANNED PROCUREMENT FOR SELECTED CATEGORIES OF WEAPONS

Equipment	1995 Level	Average Annual Procurement in 1992 - 1995
Navy Ships ^a	451	9
Navy/Marine Corps Combat Aircraft ^b	3,300	78
Air Force Fighter Aircraft ^b	2,800	18
Army Tanks ^c	6,300	0

SOURCE: Congressional Budget Office based on Department of Defense data.

- a. Includes battle force ships.
- b. CBO estimates of approximate inventory required to equip planned number of wings.
- c. CBO estimates of approximate inventory to meet Army requirements, excluding war reserves.

TABLE A-4. SELECTED SERVICE LIVES USED IN ESTIMATES OF STEADY-STATE PROCUREMENT (In years)

Equipment Item	Service Life
Army Equipment	
Combat Vehicles	30
Helicopters	30
Patriot Launchers	30
Missiles	20
Ships	
Aircraft Carriers	45
Cruisers/Destroyers	40
Frigates	30
Submarines	30
Amphibious Ships	35
Replenishment Ships	40
Aircraft	
F/A-18 Aircraft	20
E/A-6B Aircraft	35
Navy Helicopters	22-34
Air Force Fighters	21
Strategic Bombers	42
Tankers	46
Strategic Airlifters	45
Tactical Airlifters	30

SOURCE: Congressional Budget Office.

The CHAIRMAN. Thanks, Bob, for that very, very interesting testimony and interesting statement, etcetera.

Let me ask the question, how much do you have to cut the forces in order to balance the thing out, if you have to get down to \$67 billion and you have to get another \$40 billion out of the structure, so you would have to take it out of force structure. What are we talking about?

Mr. HALE. If you took it out of force structure, I cannot give you a precise answer but I would say, on the order of 10 percent to 25 percent additional cuts in force structure. The range depends on what kinds of forces are eliminated. The more expensive ones, in terms of operating costs, would keep it to the lower end; the less expensive, the higher end. So you would be talking about additional cuts of two to four in Army divisions, three to six wings, 40 to 100 ships. They're substantial.

The CHAIRMAN. Let me ask another question then on the follow-up to this. to what extent is this, you said generally it is beyond 1995 where we are looking at.

Mr. HALE. Right.

The CHAIRMAN. What I am looking at is to what extent is it a timing problem? What we have is, as you say, all of these weapon systems coming on at the same time. The C-17, the SSN-21, the follow-on to the A-6, the B-2, all of it happening at once. To what extent, if you could kind of stagger it, could you help alleviate that problem?

Mr. HALE. That would help. The way the DOD and the Congress solve these problems, generally, is doing a little of a lot of different things, and that may be one of them. The problem is going to be that the Navy has an aging fleet of combat aircraft. If DOD keeps on buying low numbers, it will also have an aging fleet of Air Force tactical fighters, and also an aging fleet of ships. The Congress will have to accept, if it staggers procurement very much, that some portions of the military are either going to have to be smaller in size than the administration plans, or older. CBO already assumes quite substantial ages, it seems to me. Maybe one could push it further, but retirement ages are already assumed at 20 to 45 years.

So yes, the Congress could stagger procurement, but there would be a price, and that is the need to keep the stuff longer.

The CHAIRMAN. Let us suppose we adopted this strategy, that you essentially went to a system where you bought the current generation. You buy in at about \$67 billion. Then what you do is selectively convert to a modern system in sequence. In other words, you do not go to the next generation in every case, but you kind of do it in sequence. I guess you would start with Navy air because that is the oldest system that you have, and depending upon what they do with the AX, but anyway, what you would try and do is, in other words, you would never get to the \$109 billion. You would start with the basic \$67 billion, but you would be adding something onto that because you would be modernizing in sequence. That might add, instead of \$40 billion it might add \$10 or \$15 billion and then you try and fudge around it to find some other offsets and try and work around the problem that way.

Mr. HALE. That sounds doable. In a sense, what you would be doing is saying that I am going to live with a somewhat lower level of modernization for many of these forces for a longer period, and that might be consistent with the threat, but the United States will not elect to forgo modernizing some portion of the force at all, ever. In that sense, it may well be doable. There are a variety of alternatives that were really beyond the scope of this testimony that may be possibilities, depending on how threats evolve or how much the United States can rely on reserves, which may hold down costs and leave you some additional money for procurement. There are a lot of other possibilities. For example, efficiencies that the department is pursuing, although the history of such services is not reassuring.

The CHAIRMAN. I think you are right, in your testimony you are kind of skeptical about that. I think—

Mr. HALE. It is just hard to point to areas where they have saved large amounts. That does not mean they should not keep trying, and I applaud their efforts, but it is hard to point to areas where you get multiple billions that we really can be sure were efficiencies.

The CHAIRMAN. Charlie Bennett.

Mr. BENNETT. In looking at what you have presented here, the thoughts go through my mind about what programs do you anticipate buying complete, or being restricted. I start off with three. The B-2, how many are we going to get of that under your program? V-22, I assume none.

Mr. HALE. That is what we assumed.

Mr. BENNETT. SDI, does it go over \$3 billion a year? I just start with those three. Do you have a feel for what we are sacrificing?

Mr. HALE. CBO did two polar cases, Mr. Bennett, and we did not try to do any in between. One assumed full modernization, though it did not include the V-22 since we were looking at the administration's proposal. Also, we did not include added funds for SDI. So if you really wanted a Global Protection Against Limited Strikes (GPALS) kind of system, you would need to add on another \$5 billion in procurement a year.

Mr. BENNETT. SDI is going to be at what figure a year?

Mr. HALE. The administration is saying that in the late 1990s, and the early part of the next decade, it's up to \$6 billion for the system that they are now advocating to provide global protection against limited strikes.

Mr. BENNETT. You could pick up a little money there, I think.

Mr. HALE. I leave that to you, sir. But we did these polar cases. One case assumed everything gets modernized with all the new weapons now planned. The B-2, the Advanced Tactical Fighter, the A-6 follow-on, the SSN-21. The other case, really for budgetary illustration, assumed DOD modernized entirely with weapons that cost the same as those today. I am not advocating that, but I wanted to illustrate the budgetary effects.

We did not try to do cases in the middle, but surely you will want to look for something in the middle, as the Chairman was suggesting. Obviously, you are not going to stop modernization. You may have to be selective about it.

Mr. BENNETT. I did not really understand what you said about the V-22. Is that entirely out?

Mr. HALE. In the case that modernizes, we were looking at the administration's proposal. Since they have not proposed the V-22, it was not included in those numbers. We would modernize Navy aircraft with new systems. We did not specifically include the V-22. Is that accurate? Wait a minute, maybe I misstated our approach.

Mr. THOMAS. We did not include the V-22, but what we did do is include money, as the administration has proposed, for Marine helicopter modernization in the modernization things. Some of that money is being thought of as being spent in lieu of the V-22 program.

Mr. BENNETT. How about the MX and the Midgetman? Did you make a decision about that, or are you going to have them both?

Mr. HALE. Again, what we were doing here was taking each system and saying what would be the follow-on cost. So yes, there is implicit in these numbers a follow-on to Minuteman.

Mr. BENNETT. But not to MX?

Mr. HALE. I think, we were probably using MX as a cost guideline.

Mr. BENNETT. You mean in drawing down the military like we are drawing it down, we still cannot make a decision about MX or Midgetman? We are still vacillating on that?

Mr. HALE. The military, I think, has made a decision.

Mr. BENNETT. To do what?

Mr. HALE. Well, they bought MX and put it in silos. Insofar as I know, that is an accomplished fact. They are still debating the rail MX version.

Mr. BENNETT. I am talking about the mobility of it. I am talking about a mobile MX.

Mr. HALE. Oh. My understanding was they have proposed one further test of the rail MX system, after which they would shelve it. So that is not going forward under their proposal.

Mr. BENNETT. So their proposal really is to have the Midgetman and the MX's probably never would become mobile.

Mr. HALE. They would retire some of the older Minuteman systems and go forward with MX in silos, and some sort of a small ICBM or Midgetman.

Mr. BENNETT. Thank you. I do not have any further questions. The CHAIRMAN. Mr. Kasich.

Mr. KASICH. Thank you, Mr. Chairman.

I want to compliment you, sir, on very, very interesting and I think very significant testimony.

Mr. HALE. Thank you.

Mr. KASICH. Let me ask you one question. It is interesting that you talk about who our future enemies are going to be beyond the Soviet Union. The people you talk about are people like the North Koreans, who have very heavy forces, very heavy army, a lot of armor. At the same time, you are saying those are the likely enemies, and I might tend to agree with you on that, we have a military that is headed in the direction of a very light army. So we can get our army where we want it to go, but once it gets there, it cannot do what it needs to do because it will be too light.

I am convinced that we are moving the Army in a direction of being far too light, and we ought to make a heavier Army. The consequences of a much heavier Army mean much more costs.

Your program assumes that we are going to lighten up the Army, is that not correct? What are the implications of a heavier Army, designed to fight the enemy that you, yourself, say is going to be the one we are going to face.

Mr. HALE. Certainly a heavier Army would cost more, but let me go back to what the administration is doing. If by "light" you mean divisions that are not armored or mechanized, something on the order of half would qualify as light today, and something on the order of 60 percent of the administration's planned cuts would be in light forces defined as not mechanized or armored. So I think actually the proportion of mechanized and armored divisions would rise modestly under their plan.

Mr. KASICH. I am told by our staff, if they are listening, that the future for the Army is to be lighter, not to be heavier. You are making the argument that the Army is going to actually be heavier. I get the exact opposite report from my staff.

Mr. HALE. It may depend on how we define light. I think if you are talking about light divisions in the sense the Army has used that term recently, that may be true. I was defining light carefully—divisions that are not mechanized or armored.

Mr. KASICH. That is what we are talking about.

Mr. HALE. If we could, could I get together with Nora Slatkin and we will work that out and get back to you?

Mr. KASICH. I would really like that, because it is going to be one of the big issues in terms of what the Army is going to look like and I am told General Vuono himself is not happy with the direction of the Army becoming much lighter and less armor capability, and less anti-armor capability.

Let me move to another question, and that is this whole issue of modernization. If we see the Soviet Union in significant economic decline, and God knows where we are going on that. I understand Webster is going to come up and testify before the panel what the key numbers are going to be, how much they are going to do on R&D, but I am not sure we can buy into those numbers because frankly, they have not been able to predict those numbers right since I have been a member of this Committee. That is not a criticism, I guess it is just very difficult to do.

When we talk about all these new generations of weapons, who are we building those weapons to defend ourselves against?

Mr. HALE. Well, there are certainly a range of threats. The most demanding one, I would think, would remain the Soviet Union in many kinds of conflicts and, therefore, in many cases, I think the margin of improvement in capability is probably aimed primarily at the Soviet Union. I want to be careful here because, obviously, the United States faces a range of threats. This country has had dramatic evidence of that in the past few months. Some of those threats are, at least on paper, substantial. Iraq's forces on paper were substantial. But still, the most technically demanding threat would still be the Soviets, as I sit here today.

Mr. KASICH. When you take a look, for example, at fighter aircraft. Their air force was zero.

Mr. HALE. Particularly in aircraft.

Mr. KASICH. Now we have an argument that we ought to be developing future generations of fighter aircraft, and it is kind of based on what the Chairman is saying. If we stay somewhat, and just pick out some areas where we clearly want to modernize, what the Pentagon wants to do is they want to modernize everything. I am not quite sure why we need to modernize everything when what we have is so overwhelmingly superior to what we have seen.

So what would the reason be to try to modernize in all these different areas? Advanced Tactical Fighter, the replacement move to an A-12, everything is moving in that direction. I am just wondering, if I am going to fight Mike Tyson, he does not have to train as hard.

Mr. HALE. In a way, I think you ought to address these questions to the department. They would probably give you a better answer. Some of what you say makes sense to me. The Congress could at least selectively reconsider where the United States needs to modernize, especially in light of budgetary problems.

Mr. KASICH. Let me ask you one other area in regard to that. I am hearing consistently that the SA-10 is going to be the biggest single threat to U.S. aircraft, going after targets. This week I talked to a guy who flew about, he has flown over 200 combat missions, and I brought the SA-10 up to him, and he said we will counter it. What I am hearing from the Pentagon is this is a system that has got death written all over it and there is no way to avoid it. Who is right in that debate?

Mr. HALE. I do not think I can answer that question for you. It does make sense to me, going back to what Mr. Dickinson said in his opening remarks, there is merit in having overwhelming force. We have seen the merit in that. Alternatively, I think the Congress faces some serious budgetary problems as you look out at this plan. It strikes me that making the kinds of choices you are suggesting is one way to address them, and it may be the only way you can address them. It may, at least, have to be part of the way you address them.

Mr. KASICH. One final question, and that is when I look at what forced Saddam Hussein out of Kuwait, I do not think it was our strategic nuclear capability that forced him to leave. Perhaps he was frightened by the possibility of a tactical nuclear strike, but more important than that, it was the sheer firepower, the air power, and the ground capability that forced him out. Yet the Pentagon insists on making more investments into strategic nuclear weapons and strategic nuclear weapon systems.

Does that make sense as we move through the 1990s into the next century, to make greater and greater investments into nuclear carrying capabilities or strategic nuclear weapons themselves, when it appears as though strategic nuclear weapons never enter into the equation when it comes to being able to use force? Does it not make sense to shift away from strategic weapons into conventional weapons?

Mr. HALE. I think it would make sense, in my mind, against Third World foes. But obviously, the United States is buying those weapons to deter the Soviet Union. Unfortunately, I assume Mr. Cheney is right when he says he sees no great slowdown in their

modernization to date of their strategic forces. So absent some kind of a START treaty, I think the question you must confront is not whether nuclear weapons scare Hussein, but rather, do they deter the Soviet Union.

The CHAIRMAN. Jim Bilbray.

Mr. BILBRAY. Thank you, Mr. Chairman.

The one thing that I was unclear on is as the fleet ages and as the aircraft age, we know the B-52s have been in action and been usable for the last 30, 35 years.

Mr. HALE. Right.

Mr. BILBRAY. What does this really mean to us, we are going to have an aging fleet? Can we keep those planes flying effectively? As Mr. Kasich has stated earlier, they have shown that they are far superior to anything they have come up against. Are we going to be at 1995 and 1996 all of a sudden with planes that do not meet the current crisis? Or can we go through the beginning of the 21st Century with the type of material, as long as we keep them repaired, or are we also going to have huge maintenance problems that are going to cause us to have a real serious problem?

Mr. HALE. I wish I had an easy, clear answer for you. I do not. I believe the Air Force is planning to keep the B-52 well into the next century. I have no reason to believe they cannot. CBO, indeed, assumed service lives that were quite long, as I remember, for the B-52. I am trying to look in CBO's overall calculations. We assumed 42 years as a time for retirement of strategic bombers, which would put the B-52's into the next century. So we are already assuming in these calculations that essentially you keep many of them into the next century.

How far can we go? I wish I had a good answer. We have managed to extend service lives in recent years, and maybe further extensions are a possibility. It would get you out of much of this dilemma. If you could extend service lives on the order of 20 percent across the board, you would get rid of a lot of this problem. You could modernize, as the Chairman was suggesting, gradually in various areas, keeping the older stuff longer.

However, if you extend all service lives, you are talking 50 years for aircraft. It seems like an awfully long time. It is hard to get spare parts.

Mr. HUTTO. Would the gentleman yield?

Mr. BILBRAY. Yes.

Mr. HUTTO. Is not naval air power in even greater danger than Air Force, but with the age of the aircraft that we are at?

Mr. HALE. It is older than other kinds of combat aircraft. I think it is one thing to talk about keeping a bomber 50 years. I would assume the department would agree it would be crazy to talk about keeping fighter aircraft for anywhere near that period. We are really not planning to keep any of them more than about 30 years to my knowledge.

So I think if you were going to pick an area that has problems right now, naval aviation would be it, as we look into the next century. Probably not the next few years, but as we look into the next century.

Coming back to your point, it may be a possibility. We acknowledge it in our testimony. I guess I would feel uncomfortable sitting

here, though, and telling you that you could keep bombers for 50 or 55 years, that you would then be keeping carriers for 55 years. It seems like an awfully long time.

Mr. BILBRAY. It would be interesting to me as a member of the Committee, and especially newer members, I have been on 2 years and am going on my third year, to get an idea of what the average age of our fleet is, the type of ships they are talking about keeping. What is a realistic figure for keeping them afloat to the point that they become such a maintenance problem that it is better to replace them? The same thing with aircraft, both naval and Air Force, and other equipment for the Army. How long can we keep a tank in the field if we maintain it? We know some cars you can keep 5 years, others you can keep 20 years. If it's a Rolls Royce you can keep it for 50 years. What do we mean by that? Are we going to all of a sudden, those of us that hopefully are still on the committee in 1995, 1996 can all of a sudden face this crisis, or can we defer it by just good maintenance and keeping what we have running well?

Mr. KASICH. Would the gentleman yield?

Mr. BILBRAY. Yes, I would.

Mr. KASICH. The issue is, can you keep the older platforms and modernize the munitions that flow from those platforms.

Mr. HALE. That is another issue that comes, I think, out of Operation Desert Storm. Can we rely more on smart weapons and use relatively dumber platforms?

At a minimum, I can provide the assumptions that CBO has used. The evidence that I am aware of on what happens in terms of added maintenance costs is very unclear. If you tried to correlate age with maintenance costs, what you see is not much correlation. But part of the reason may be that the military does, quite sensibly, what you would do or I would do with an older car. If you know you are going to get rid of it soon, you do not fix it. So essentially, they know they are going to retire a weapon and they just simply do not put much money into it. So when we come along as budget analysts and try to look and see if that old weapon costs a lot, the answer is no. But it does not necessarily mean it would not, had they tried to keep it another 5 years.

So I will provide you what evidence I can, and I urge you to address these questions, maybe in the context of this testimony, to some of the administration witnesses who I think would have more engineering expertise than CBO is able to bring you.

Mr. BILBRAY. I appreciate that, but we need what you are going to give us to answer those questions.

Thank you, Mr. Chairman.

[The following information was received for the record:]

AGE AND OPERATING COSTS

CBO is unaware of studies on the historical relationship between costs and for Army, Navy, and Marine Corps weapons systems, though they may exist. CBO has reviewed Air Force studies of this relationship for a variety of aircraft. The Air Force studies provide no empirical support for the idea that costs increase as planes age. This is contrary to the traditional hypothesis that costs, after declining rapidly when the plane is first fielded and remaining constant for a number of years, will then begin to rise as the plane reaches retirement, which is perhaps around 20 years of service for fighters.

Several factors may contribute to the lack of historical evidence for this hypothesis, including the one suggested by Mr. Hale in his testimony that planes nearing retirement may not receive the same degree of maintenance as younger planes. Another reason may be the high level of maintenance aircraft receive throughout their lives when they are sent periodically to depot maintenance facilities. When a plane goes through what the Air Force terms "programmed depot maintenance," many of its components are replaced with newer equipment, so that even very old aircraft may be made up of relatively young parts. For whatever reason, Air Force estimates for operating costs over the life of a system now reflect empirically observed patterns with no projections of operating cost increases for older systems.

The CHAIRMAN. Neal Abercrombie.

Mr. ABERCROMBIE. I am interested in your assessment vis-a-vis the Soviet Union. I am not entirely certain, maybe I was not able to follow by just looking at the board here, exactly what you meant by the forces.

When you use, for example, on page nine, in 1988 the capability of the Soviet Union, its allies, and the Warsaw Pact exceeded the capability of the United States and its NATO allies by a ratio of 1.6 to one for ground forces. I understand that, but in this draw-down, and then referring to your earlier testimony about how the budgets might be affected, depending on whether there was a smaller reduction. I think you used 25 percent, if I am not mistaken.

Mr. HALE. You mean what were the budgetary effects of a smaller draw-down?

Mr. ABERCROMBIE. Smaller draw-down. We might have to add \$12 billion, I think, something of that nature. Then there was a discussion about could that be done in a domestic budget and so on and so forth. Then it goes off into having to speak to the Jesuits about how to handle it.

Mr. HALE. That was not in the testimony, may the record show.

Mr. ABERCROMBIE. No, but the Jesuits decide then, on this.

How do you relate air power, then, or the missile, the so-called missile threat, or the reality of the missile threat in relation to what you talk about on the ground forces and whether or not the Soviet Union can move or not move? Or is that getting into too much strategic discussion?

Mr. HALE. I am not sure. Let me try to answer your question and see if I do.

Mr. ABERCROMBIE. Am I clear enough in what I am trying to ask?

Mr. HALE. I am not absolutely certain. If we made a one-third smaller force cut, for example, these bars would obviously look worse, the purple—

Mr. ABERCROMBIE. These bars include Air Force and include—

Mr. HALE. No, sir. What you have here are ground forces only. It is primarily Army, just a little bit of Marine Corps that CBO assumes play here. There is an attempt on page 10, if you have my prepared statement in front of you, to do something analogous for tactical aircraft. What you see is a little less favorable situation for NATO, the United States and its NATO allies, particularly if the CFE Treaty is not ratified. But we cannot add the two together well analytically. That is a very hard thing to do.

Mr. ABERCROMBIE. The reason I am asking the question is, if we are just talking about numbers, we may lose sight of the human dimension, if you will, of what happens when these numbers

change in terms of strategy and tactics. I do not propose, and obviously you do not propose, to debate that today. But that would get to where all of these questions are coming at. What exactly do we concentrate on? Once you do something, say draw-down the ground forces, then on the other side, say the Soviet Union side, they may then start thinking strategically in much different terms in where they tend to concentrate their expenditures. That, in turn, affects what we do. Then we get into a ping-pong game of budget analysis, none of which may have anything to do with the way strategy plays out, should there be a conflict situation.

Mr. HALE. I think I see your point, and I am sympathetic.

Mr. ABERCROMBIE. It is very difficult for me to conceal how I can cast responsible votes vis-a-vis either personnel drawdowns or weapon systems modernizations, when I have to put it into a context of likely scenarios without calling in Mr. Clancy to write a new book every other 3 months.

Mr. HALE. This may not be helpful but let me say that this is clearly only one part of the calculus that you are going to have to consider when you decide how to vote. CBO can tell you what changes in the number of quality and weapons do, although even that assessment has a lot of uncertainty, but it gives you an idea. If the CFE Treaty is not notified, we cut but they don't, then the Pact has a modest advantage against NATO.

What I cannot do for you is suggest how that influences their thinking in light of everything else that is going on, as mentioned in the testimony. They now may face an Eastern Europe that would rather be in NATO. I do not know what would happen if they contemplated military action, but it is certainly quite possible that those countries might even fight against them and certainly would not be on their side. That has to influence their thinking. None of that is in these graphs. All I can do is give you an idea of what the cuts in forces might do to these balances.

Mr. ABERCROMBIE. Thank you. Mr. Chairman, my bottom line simply is that I would need, as a responsible member, a much clearer idea in my own mind of what modernization means in the context of possible strategic scenarios, I should not even use strategic. Possible scenarios of confrontation.

The CHAIRMAN. Mr. Bateman.

Mr. BATEMAN. Thank you, Mr. Chairman.

Mr. Hale, your testimony, I think, is very illuminating, and I can imagine you sense some degree of frustration because of the necessities of the approaches that you have to take.

I suspect on this modernization question, the real key is not just modernization in gross in terms of years and age of systems, but analyzing systems versus systems, and how far ahead we are in technology in one as opposed to others, which I think is beyond the charge that you are presently dealing with.

Mr. HALE. I think that is fair.

Mr. BATEMAN. The other aspect of it is, you were given a charge to deal with five major categories. One category you were not charged to deal with, but which is incredibly important, at least in my opinion, is industrial base considerations. If you cannot maintain an industrial base, you are not going to be able to modernize, you are not going to be able to produce systems, follow-on systems,

and you certainly are not going to be able to do anything within reasonable parameters of cost unless you can sustain certain minimal levels of industrial capability. I do not know if anyone has charged you with that, but to the extent that will lend itself to analysis, I think we need a great deal of analysis done in that area.

Which leads me to page 20 of your prepared statement, and particularly the focus on the comparative ages over time of certain systems. You have a chart at page 21, I think.

Mr. HALE. Yes.

Mr. BATEMAN. That indicates, for instance, in the category of attack submarines that we are going to stay level at an average age of 14 years. Am I correct that the reason that phenomena occurs is because we are going to be retiring more old submarines than we are going to be deploying new submarines?

Mr. HALE. On balance, yes, I think that is right. There is a lot going on in all of these numbers. Perhaps less in the Navy, but particularly in the Air Force. The Department is retiring a lot of systems. That is what is driving down the average age of Air Force tactical aircraft in 1993. The Air Force is retiring a large number of wings. They are not buying very much, but they are getting rid of all the older ones, so the average goes down.

Mr. BATEMAN. That is for 1993, but for 1995, the Air Force—

Mr. HALE. It goes back up again because the Air Force plan has to be front loaded. They make almost all their retirements, or many of them, by 1993, and they are not buying anything.

Mr. BATEMAN. Navy combat aircraft get older throughout the period that is delineated.

Mr. HALE. Yes.

Mr. BATEMAN. Naval surface combatant ships go 15, 13, 14. There again, the phenomena that keeps that from being a lot longer is they are going to be retiring so much.

Mr. HALE. Right.

Mr. BATEMAN. It also does not give us, in terms of measurement of our needs and emphasis, what the Soviets are doing in terms of modernization of their fleet. Our information would suggest that they are getting rid of a great deal of old, basically useless stuff, and ships that will not sail, ships that even get sunk on their way to the salvage yard, and things like that. But it is not giving us what, at some point from some source, we need in terms of what is the naval capability that we need to maintain vis-a-vis the threat. I suspect, and would call my colleagues' attention to the fact that I think we've got this in absolute spades when it comes to submarines, and the numbers game and quality game contrast that we are presented with.

Mr. Chairman, I believe that is all I have, unless Mr. Hale has some comments to make.

Mr. HALE. Only to say that your implication that this is only one kind of input is well taken. It is not meant to be a final net assessment in any sense.

The CHAIRMAN. Mr. Sisisky.

Mr. SISISKY. My colleague from Virginia has read my mind about the industrial base and what we are going to do about it. I may have one question left.

You mentioned right at the beginning of your statement something about intelligence, that we will hear about it later that will have an affect upon the budget?

Mr. HALE. Yes, sir. There is a potential for a problem with the defense budget exceeding last year's budget agreement in terms of outlays. It matches in budget authority, it may not in outlays.

That is so under CBO's estimates because the Department of Defense transfers some budget authority from its budget to intelligence agencies. Prior to 1992, when they made the transfer, DOD assumed if they transferred a dollar of budget authority that they got a dollar of outlays in their budget in the first year. Essentially, they assumed a 100 percent spend-out rate. The agencies do not spend money that fast, and now the department has decided that it will use lower spend-out rates in 1992 and beyond, which results in a one-time reduction in DOD outlays. I can see the quizzical look on your face, and I do not blame you. Let me finish and then you tell me if you want to hear more.

This may be a reasonable change, but CBO believes it is a conceptual change. The Budget Enforcement Act of 1990 said that if there are conceptual changes that reduce outlays, the cap must be reduced. The administration did not do that, so CBO believes that they have inappropriately claimed that reduction in outlays. If CBO's interpretation is accepted by the budget committees and the Congress, the defense budget will exceed the targets in terms of outlays. Conceivably, eliminating the excess outlays could require substantive changes in the defense budget.

Mr. SISISKY. About how much?

Mr. HALE. DOD outlays exceed target by \$3 billion. If you have to make substantive changes to reduce outlays, you could cut budget authority. Depending on what you cut, you might need \$4 billion to \$10 billion in reduced budget authority to get \$3 billion in outlays in the first year. Or you could shift money from faster spending accounts like personnel and operation and maintenance into slower spending ones, like procurement. How much shifting would depend on exactly what you shifted, but it would be multiple billions, certainly, that you would have to change from fast- to slow-spending accounts. None of those changes will be easy in a period when you are already drawing down the military.

The CHAIRMAN. It sounds like a good argument for going for the old back to the deal which lets OMB score this and not you guys.

[Laughter]

Mr. BATEMAN. I wonder if the gentleman would yield on the question of the personnel account and the spending rates there. The suggestion that the way to fix this might be to transfer things from the high spending personnel accounts to slower spending accounts. What is the premise of the budget that we have with reference to end strength, personnel end strength, fiscal year 1992? Is not it already predicated to fund very, very steep cuts, getting back to the fact of last year's projected drawdown?

Mr. HALE. It would be very difficult to make the transfer I just mentioned. I think I would just like to stop right there, because to do it, you would probably have to draw down end strength even quicker and, in light of the problems with the phase-down in Desert Storm, that would be hard.

All I am trying to say is, if you have to get \$3 billion out of the budget in outlays in 1992, it will not be easy.

Mr. BATEMAN. Mr. Chairman, I want to get a plug in for it is not only not easy, we are looking at, in terms of personnel and end strength, an enormous challenge to get where the originally-submitted budget expects us to get, bearing in mind we have built up during the course of Desert Storm. To get even to where fiscal year 1992 budget proposes is going to be almost traumatic. To do more than that would be absolutely devastating.

Mr. SISISKY. The obsolescence, of course your report is a very good report, but it is not a very heartening report for those who believe that our first priority is to protect the security of this Nation. I am really concerned about the obsolescence. This is no light thing that we are talking about. We could go for a number of years, and I think you so stated, that you could go for a number of years just off the inventory. The problem comes about is that what happens is that obsolescence may come in a block, and this is what happened in the early 1980s, am I correct, when the defense budget just went through the ceiling because of some things we had not done in the 1970s, to a degree?

Mr. HALE. Procurement spending was certainly relatively low in the late 1970s.

Mr. SISISKY. Your figures, and I think my colleague from Virginia discussed those, the average age really is unmeaningful. We retired submarines last year that were 21 years and 22 years, respectively, in age. There were a couple of reasons for retiring them. Number one, we did not want to repair them. Number two, the technology changes so fast in the high technology weapons that we have, that we really face a problem.

I do not know where our next enemy is going to be. You can have all kinds of scenarios if you want, but you can bet your life that we are going to have one somewhere, some place. I think we have to prepare for the worst, and I just do not know if this budget that we are talking about in the next 5 years or even 10 years, is going to take us there.

Which brings up the other logical thing we really, sooner or later, Mr. Chairman, have to talk about. Are we going to be doing enough with the budget commitments we have, to protect the security of this Nation? I think we are going to have to face this some time in the very near future. I think for the next 2 years, and I think you said it, I believe it, that we are going to be all right, but after that, I think we really have to look at it very closely.

Mr. HALE. Some of the decisions are nearer term, it seems to me. If you make a choice to go forward with all the new weapons, perhaps a decision that is appropriate in light of the threat, I think you will not be able to buy cheaper weapons when the mid- and late-1990s come. You will simply have to find more money, or probably accept larger force cuts than the administration plans.

Mr. SISISKY. Since you mentioned that—

Mr. HALE. It is not all a problem of the late 1990s.

Mr. SISISKY. We look at one weapon system, the B-2. It is stealth, but do we really need it now? Could we use standoff weapons? That is a decision, obviously, we are going to have to make. SDI, can we ever develop it enough to protect us entirely?

Thank you.

The CHAIRMAN. Mr. Ray.

Mr. RAY. Thank you, Mr. Chairman.

Along that line of questioning, I think that begs the case for a good research and development budget. How do you see that shaping up? If we aren't going to be producing a lot of new weapon systems, we certainly ought to be investing in research and development, we ought to have a good budget in that respect.

Mr. HALE. I cannot give you a complete answer. I can tell you the overall cut in the R&D budget is smaller than the cut in the budget as a whole, but not all that much smaller. Between 1990 and 1995, the budget for defense as a whole will be cut by about 22 percent; R&D will be cut by 16 percent. If basic research is your concern, defined by DOD's categories 6.1 and 6.2, they were cut less; I am not sure of the 1990 to 1995 level, but I think it is less than 16 percent real cut. So they received some relative emphasis, but they were still cut. They certainly did not come anywhere near what the Congress provided as guidance last year for 2 percent annual real growth.

I can tell you the dollars. I think I cannot translate that into a statement of whether that is an adequate R&D budget.

Mr. RAY. One thing that bothers me a good bit is the fact that in the DOD budget reductions, they reduce overhead and they reduce particularly depot and logistics budgets about the same as other budgets, while in tough years these budgets should probably be at least adequate or a little bit higher.

What is the relationship between the number of civilian employees of the Department of Defense, and the size of the military force? Is it appropriate for the number of civilian employees to be drawn down at a slower rate than the active force, as is currently planned? Do you have any comments or thoughts on that?

Mr. HALE. Let me separate two aspects of that question. As far as CBO can tell, DOD's total budget is consistent with holding readiness constant. This is not an easy conclusion to reach. It is not easy to translate dollars into measures of readiness such as for example, those in the C rating system. But CBO has determined that readiness-related spending—that is, the dollars associated with units—could be held constant in DOD's budget plan if DOD can achieve roughly proportional cuts in these things CBO calls overhead, which is much of the training and medical establishment and so forth. So, in that sense, DOD's statements that they are maintaining readiness may be quite consistent with their budget, and I have to give them credit for that. In that sense, I think it is a fairly forthcoming budget.

Mr. RAY. Have you had an opportunity to look at the new Defense Business Reorganization Plan, the DBR, I think they call it.

Mr. HALE. Is this the OBOP? Defense Business—

Mr. RAY. Yes.

Mr. HALE. We have not looked at that in detail.

Can I go back just a moment, too, because I think I did not answer the other part of your question about the civilians. I think CBO is a bit puzzled by why civilian personnel are declining more slowly, or by a smaller amount in this budget than military people. While active-duty military personnel are cut by about 20 percent

between 1990 and 1995, civilians decline by only about 12 percent. If overhead is cut proportionally, as the administration appears to be doing, and overhead functions employ a lot of civilians, I think CBO would have expected something nearer a 20 percent cut in civilians. So I am a bit puzzled. CBO has asked the Department of Defense about this difference. They have said they are planning some substitution of civilian for military people. Maybe that explains it, but as I say, I remain a bit puzzled.

Mr. RAY. In reductions, would you have any thought about the reductions of reserve forces compared to active forces? As I understand, that is about a 50-50 reduction rate.

Mr. HALE. Right, it is about the same.

Mr. RAY. Is that fair in your mind? Or should we keep a little larger percentage of—

Mr. HALE. In past years, the Congress has pushed for greater use of reserves. That push is not reflected in this budget, at least not in DOD as a whole. There is more emphasis on reserves in the Air Force, somewhat less in the Navy and Marine Corps, and about the same in the Army, as measured by people.

I think the reserve issue is complicated now by a need to sort through how effective the reserves were in Operation Desert Storm. We know some of them were effective. Support forces in the Army, Air Force Reserve certainly to my knowledge, were quite effective. Greater use of those forces offers some opportunity for savings.

Mr. RAY. Thank you, you have presented a very excellent report. We appreciate it.

The CHAIRMAN. Mr. Spence.

Mr. SPENCE. Thank you, Mr. Chairman.

Mr. Hale, you said the administration is going to project a Navy of 450 ships in 1995.

Mr. HALE. Correct.

Mr. SPENCE. Did you say that the shipbuilding budget in the meantime will not get us that figure?

Mr. HALE. No. They have a plan that will certainly get you to that figure in 1995. What CBO has said is that they are not buying enough ships over the next 5 years to keep it at 450 ships in the long run. If they kept buying nine ships a year on average, which is what they are planning, and if you retired ships at the ages they plan to retire them, in 30 years you would end up with a smaller fleet, probably on the order of 300 ships. But the lower level would not be realized for many years. They can live off their stock for a number of years.

Mr. SPENCE. My next question, are you taking into consideration the retirements of ships in the meantime and those kinds of things, too?

Mr. HALE. In the projection of where they would have, buying nine ships a year, yes. CBO tried to use their planned retirements.

Mr. SPENCE. Another area, the force buildup during the last year or so, I guess, in connection with the Persian Gulf operation, how does that affect the reductions projected in the 1992 budget and beyond that?

Mr. HALE. It is easy to answer for 1991. The Congress is dealing with that now in the supplemental. But 1992 may also be affected.

The Department will start 1992 at a higher level of personnel than it anticipated in this budget. So even if it gets back on track by the end of 1992, I would assume the average number of personnel in 1992 would be modestly higher than the Department was planning on, so it is possible that there may be some need for added funding.

I would think that beyond 1992 DOD would have a shot at getting back on the path of reductions anticipated in this budget plan, if that is deemed appropriate in terms of threats to U.S. security.

Mr. SPENCE. Thank you. That is all I have, Mr. Chairman.

The CHAIRMAN. Mr. Taylor.

Mr. TAYLOR. Nothing, sir.

The CHAIRMAN. Mr. Kyl.

Mr. KYL. Thank you, Mr. Chairman.

First, Mr. Hale, let me make sure that there is not an implication in your report that I think would be unfortunate. On page 19, and following on with Mr. Ray's questioning regarding R&D, you point out the fact that R&D receives a little less of a cut in proportion than the other areas. Then talk about the fact that a significant part of that is SDI. Much of the growth in 1992 pays for increased funding for one program, the Strategic Defense Initiative.

First of all, that is, let us assume that instead of \$4.6 billion, it is \$4.0 billion, which is probably a little bit more realistic. But that would still only be 10 percent of the R&D budget. I do not think you are inferring that that is necessarily too much are you?

Mr. HALE. No, CBO was simply trying to point out a program that, as you and everyone else is aware, has been contentious in the past. No more, no less.

Mr. KYL. Second, of course, that program itself contains a great deal of other technology. For example, the 22 critical technologies embodied within the SDI program have relation to many other parts of the defense R&D program than just ballistic missile defense, correct?

Mr. HALE. I think that is fair.

Mr. KYL. Just an observation here, and I would appreciate your comment on it. A couple of weeks ago we had, I think it was General Cienciolo, if I pronounced that correctly, who was talking to us about the technological aspects of the Gulf War, and in response to a question I asked him he said yes, he thought that probably we fought this war, in many respects, at the peak of our technological superiority, that we had just put on-line several weapons that were really technologically new, and he also indicated agreement with the proposition that we felt we had to use those weapons in order to trump what the opponent had in this case.

For example, because the opponent might have been using chemicals, we wanted to bring on-line the M1-A1 tank which had the chemical capability, anti-chemical capability, that its immediate predecessor did not. That we wanted to bring on the Apache helicopter and the M1-A1 in order to deal with the T-72 of the Soviets. That something like 30 percent of the missions in the first day were accounted for by the Stealth fighter bomber representing only 3 percent of the aircraft. The Tomahawks, laser-guided, and all of the rest of it. Even against a second rate kind of power like Iraq.

He also said that 10 years from now, under the plan that was being presented, that we would be fighting the next war 10 years from now with essentially the same weapons. In other words, there would not be a lot of new technological innovation in that period of time.

This, it seems to me, causes some concerns in this whole analysis of modernization that you have testified to when you talk about airplanes that are maybe 40 to 50 or maybe even longer in their life. We talk about using the B-52 with a better standoff capability, and yet even so, there were many weapons that we only used because we could achieve air superiority which could not necessarily be achieved against an opponent with a better air force, for example. Maybe we would not have been able to use the A-10 tank killer or the B-52, for example.

I just muse here that the life span of the B-52 under just a 40 year analysis would be longer than the time period between, before there ever was such a thing as an airplane, when the Wright brothers flew, to World War II. It does cause you to stop and think, particularly when you understand that technology is now advancing exponentially at a faster and faster pace than clearly it did in the first half of this century.

All of this is just musing on my part, but I am sure it went into your analysis, too, about the necessity to modernize and the fact that clearly we have to continue to modernize, that we cannot simply rely upon the existing technology and existing weapons indefinitely. That at a minimum, I gather you would agree it needs to be a rolling modernization, that is to say perhaps not all at once but on a fairly steady pace, making sure that everything turns over within its logical lifetime.

If you have any comments on any of that, I would be pleased to get them, but it is more in the nature of just musing on my part.

Mr. HALE. Just one thing. It seems to me that there are at least a couple of weapons that would be available in 10 years that the United States did not use over there: the B-2, if we buy it; and the AMRAAM, Advanced Medium Range Air-to-Air Missile. If we got into a major air war, I would think they could be quite important. There are probably a number of others.

But let me go back to your overall point which is, I think, what CBO is saying. We are not saying do not modernize, at least I did not mean to imply that. What we are saying is that if you choose to modernize with everything that is now planned, you will need to spend more money than the department is programming. You may be able to do that but, in a tight budgetary situation, we feel it is our job to keep that issue at the forefront. That concern on whether or not to modernize, is our message.

Mr. KYL. Mr. Hale, I clearly understand that. I appreciate the analysis, because I think it tells us something we have to hear. My own opinion is that what you have told us is that it may not be possible to do the job that at least some people think we need to do with the amount of money we are talking about budgeting. That would be my own personal view, Mr. Chairman.

Mr. TAYLOR. Mr. Chairman, could I as a followup?

The CHAIRMAN. Sure.

Mr. TAYLOR. Mr. Hale, I am curious, getting back to Congressman Kyl's comments, talking about that competitive edge and the newer weapons that were on-line for this conflict, and obviously things like the smart bombs taking out the bunkers that were said to be impregnable and a number of other things.

Could the CBO put a dollar amount on what it would cost to get that edge back? Obviously, there were a lot of Soviet advisers/hostages over there watching a lot of things being dropped. I would not doubt that they were taking notes as all this was going on.

Mr. HALE. I am not sure. I think the United States would still have the competitive edge. I suppose against the Soviet Union if we had to get into that kind of a war. It would be a lot closer fight.

Mr. TAYLOR. I would assume for the next month, year, whatever, or so—

Mr. HALE. You mean 10 years from now.

Mr. TAYLOR. I would not doubt that they have gone back to Moscow with what they have seen and are already, I would think, taking steps to address those weapons.

Mr. HALE. I do not know. I wonder if they can afford those steps. I do not know, but I wonder. I do not know how CBO would do that. I think it would be speculative in the extreme to try to assign any kind of dollar price because you really have to make assumptions, or guesses, about what the Soviets are going to do. I would never have guessed that what has happened over the last few years would have taken place. I certainly would not want to guess what will happen over the next few years. I think this country is going to have to steer for awhile by its wake, if you will, and watch and see what happens and try to adjust in terms of reacting to the Soviets.

Mr. TAYLOR. When do you think would be an adequate amount of time to judge whether or not that as a result of this and what the Soviets have witnessed over there, when would be an adequate period of time to see whether or not they are moving from, would be taking money out of say their intercontinental ballistics and putting it back into conventionals to counter some of these things?

Mr. HALE. That is an excellent question, but I am not sure of the answer. Could I suggest that you ask Mr. Webster? I really do not think I have a good answer, and I would rather not speculate.

Mr. TAYLOR. Thank you, Mr. Chairman.

The CHAIRMAN. Ron Machtley.

Mr. MACHTLEY. Thank you, Mr. Chairman.

I just want to approach the question of embarrassment relative to what we are getting for our dollars in another way, since you have obviously, probably analyzed this process much more in depth than anyone here.

On the Committee, I think you are hearing a sense, a gut feeling, that this precipitous decline may be too much, too fast. What we are trying to get is some analytical measuring stick, whether you are talking about specific weapon systems or the total budget itself.

As you looked at this budget process and did your analysis in specifically those four areas which I have read in your document here, did you have a strategic plan or any information that could permit you to draw conclusions as opposed to saying we have re-

duced the personnel in the Marines by 13 percent. That is an irrelevant number unless we can measure it against something else.

Mr. HALE. That is inherently judgmental and, therefore, goes beyond what CBO can do. I think that the kinds of balance assessments CBO has tried to do are one piece of information to consider. As we say in the report, I could understand why some policymakers might be reluctant to make cuts as large as those that are being proposed, particularly if the United States cuts and the Soviets don't, because that would give the Soviets back modest advantages in some cases in ground and air forces.

To me, this result emphasizes the importance of the CFE Treaty. If all parties, particularly the Soviet Union, comply with it, the cuts they would be required to make would allow the United States to make our cuts and still have an advantage. But I do not think I can draw a bottom line for you. I can only give you inputs that might help you make that judgment.

Mr. MACHTLEY. I understand, but my question was did you have access to strategic plans to help you measure your analysis to make some conclusions, or were you just analyzing the numerical numbers?

Mr. HALE. CBO was focusing on what the administration has proposed in numbers. Our expertise is in dollars and quantitative projections. I do not think that CBO asked for or had a strategic plan for us in assessing the administration's budget proposal.

Mr. MACHTLEY. I think that is the element which seems to be missing in this whole budgetary discussion. If someone came over here and said look, for the next 10 years here is the ideal strategic plan based on the perceived threats that we know, and of course they are running global war games at all the war colleges, and they have ideas what the next perceivable threat will be. You figure out whether you can afford it. That is not what we are hearing. What we are hearing is, here are the dollars, and let us figure out how we can buy things and spend money within that number.

Does that seem to you to be backing into the budget process?

Mr. HALE. In an academic sense, yes. It is an argument I have heard for as long as I have been in the defense analysis game. Ideally, you should figure out what you need and then worry about how you pay for it. But I think the reason defense planners consider dollars first is that they cannot figure out what they need with much confidence. There is a wide range of needs, depending on the wide range of assumptions about what the world will look like and what threats to U.S. security will be. So defense planners make somewhat arbitrary guesses about what the United States could afford, and then try to fit forces within it and then step back and ask, "is that still reasonable?"

I sense that is what the administration did last year, and Senator Nunn did to an extent in arriving at his budget plan. So far, what I have heard, the administration says that when they have stepped back and assessed their plan, they are a little uncomfortable. Mr. Cheney called it a "good news plan." But they are still adhering to it. They still feel it is appropriate.

Mr. MACHTLEY. Another situation is where each of the services presents their budget and then you looked at them. Let us look at the strategic weapons. We have, for decades, since we have gotten

into this business, thought of a strategic triad, and there has been this assumption there has to be an equilateral triangle. As we are seeing the fights of the B-2 and the other systems, it appears to me that this may not be necessarily true.

Do you, in your analysis, compare costs of strategic systems versus other systems, or are these issues that are unresolvable?

Mr. HALE. What CBO does is look at options that would affect the way the United States carries out strategic deterrence, including options that trade off strategic versus conventional forces. What CBO does not do is make a recommendation of where you ought to go. Our job is to provide you with options and analyses of the plans, not to make a recommendation.

I understand your frustration, since you have to make a decision. I guess all I can say is we can provide you some inputs, but by no means all that you need.

Mr. MACHTLEY. Finally, if we are going to make those decisions, at some point we have to have red flags going up to say and that means it is an irreversible decision, particularly as it relates to the industrial base. As you go through this budget, what are the red flags that you saw? I know of one with the submarine manufacturing facilities. When we go to one submarine, that is effectively making the strategic decision that we will have one builder. When we put our battleships in mothballs, we are effectively saying you are losing 25 percent of your shore bombardment capability.

In this budget, are there flags you see that we should be aware of?

Mr. HALE. In terms of the industrial base, I think at the point you close both the F-15 and F-16 production lines and have, essentially only two new fighters out there, presumably a follow-on to the A-6 and the Advanced Tactical Fighters, you are going to be down to probably two major airframe manufacturers. There will be a lot of other companies involved in the business.

The industrial base, though, has gone through ups and downs before. It went through a relatively severe down period in the 1970s and seemed to be able to come back in the early 1980s and accommodate a surge of procurement. So I do not think I would care to sit here and tell you the United States is going to end up in 1995 with an industrial base that could not handle a substantial increase in procurement. I think there is a fair amount of resiliency out there, or seems to be, based on history.

Mr. MACHTLEY. But you would certainly agree that one submarine per year means that only one shipbuilder will be—

Mr. HALE. That would seem quite reasonable, yes. The Navy, particularly, buys such small numbers of systems, that yes, you are right.

Mr. MACHTLEY. If you have only one shipbuilder, you have almost irrevocably altered a strategic resource.

Mr. HALE. That sounds reasonable.

Mr. MACHTLEY. Thank you.

The CHAIRMAN. Bob, thank you very much.

Mr. HALE. Thank you.

The CHAIRMAN. That was very, very interesting today, and I think it was very helpful to the Committee. Thank you.

[Whereupon, at 2:35 p.m. the hearing was adjourned.]

**GOLDWATER-NICHOLS DOD REORGANIZATION ACT OF
1986 AND THE GULF WAR**

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
DEFENSE POLICY PANEL,
Washington, DC, Friday, April 12, 1991.

The panel met, pursuant to notice, at 9 a.m., in room 2118, Rayburn House Office Building, Hon. Les Aspin (chairman of the committee) presiding.

**STATEMENT OF HON. LES ASPIN, A REPRESENTATIVE FROM
WISCONSIN, CHAIRMAN, HOUSE ARMED SERVICES COMMITTEE**

The CHAIRMAN. The meeting will come to order.

Today is the first of two hearings that we are going to do on the operation of the Goldwater-Nichols Act in Desert Storm.

We have with us today witnesses who were in a sense present at the creation: former Secretary of Defense Harold Brown, former Chairman of the Joint Chiefs David Jones. We have Adm. Harry Train, former Commander in Chief of the U.S. Atlantic Command, and Vice Chairman of the Joint Chiefs Gen. Robert Herres. The other two witnesses will be here shortly but we wanted to begin right now because Secretary Brown has to leave and we want to make sure we have a chance to hear from him.

We have a truly distinguished panel and we are honored to have all of you here. David Jones was really the first Chairman to speak out about the need to fix the system. Without his courageous public stand in favor of reform, we might never have made the improvements embodied in Goldwater-Nichols. Sir, the country owes you a great debt of gratitude for that.

We are examining Goldwater-Nichols as part of a larger effort to learn the lessons of this war in order to provide a defense that works. At this point, let me call upon Secretary Brown for his statement and then General Jones.

**STATEMENT OF HAROLD BROWN, FORMER SECRETARY OF
DEFENSE**

Mr. BROWN. Thank you very much, Mr. Chairman. It is always a pleasure to appear before this committee—even more a pleasure when one is out of office.

I don't have a prepared statement.

The CHAIRMAN. The world is full of unemployed stand-up comics, and Harold Brown is moonlighting.

Mr. BROWN. I don't have any prepared statement, Mr. Chairman, but I do have a few remarks.

On the success of Goldwater-Nichols' provisions during the Persian Gulf: In terms of the changes in the command line affecting specifically the Chairman of the Joint Chiefs, the Joint Staff, and the Unified and Specified Commanders, it seems to me that the Goldwater-Nichols Act has been very successful. The Chairmen, that is, Admiral Crowe and General Powell, who have served under its provisions, have moved very successfully to implement those provisions. There is more to be done. But I think we can say that it is a success.

Now, one should not draw too many conclusions from the gulf war, because it is not exactly a reproducible situation. The Soviets behaved in a more cooperative way than they would have by far 2 years before, and most likely more cooperatively than they will behave 2 years from now. That made planning and execution considerably more feasible.

Moreover, we had 6 months to get ready for the offensive military actions. Indeed, we had about 12 years before that, because that is how long planning has been going on in the Defense Department for a war there, although it wasn't clear during that period just who would be the enemy. There are various candidates. Moreover many mistakes were made by the other side. Finally, the President and his team handled both the political context in forming the coalition and the military operations very, very impressively. So one really has to look into the details to see how Goldwater-Nichols operated, and I am not closely familiar with the details. But some things seem to be pretty clear.

The planning was better because of Goldwater-Nichols and there was improvement even over the last couple of years. After all, some of the same people were involved in the Panama operation, and that one didn't go quite so smoothly, although it was much less challenging. Also, there was less time to plan the Panama operation. But the organization wasn't as good then as it became.

The authority of the Chairman of the Joint Chiefs of Staff was raised. He became a communication channel with very close involvement, at the political-military level, with the political decisionmakers. That worked very well. The planning by the Joint Staff and by the staff of the Unified Commander worked very well. Obviously the higher caliber of Joint Staff personnel that flowed from the directives in the Goldwater-Nichols bill worked very well.

Finally, the unified commander obviously had substantial authority, both for the planning and for the execution. That had a very good effect. There are still some problems, I think. Again, looking from the outside, it seems to me desirable to have a single ground force person on the staff of the unified commander. We had two ground forces. I think we should have a single air commander as well. I think there was movement in that direction for this operation, but probably not far enough.

As often is the case, naval command provides the most opportunity for a disconnect. I understand that the naval forces in the Persian Gulf were under the authority of the Unified Commander but not those in the Arabian Sea. I don't think it mattered all that much in this case because a lot of those operations, again, as I understand it, could be handled somewhat separately, but I think more needs to be done in that regard.

The existence of the Transportation Command clearly was an improvement, which people in the Defense Department had been pressing for for a period of over 20 years. Finally it had begun to happen.

Again, whether the glitches in logistics were the result of an incomplete unification there or as some might have it, the result of too much unification, I can't say. My guess is that more needs to be done in unifying those.

The Army-Air Force coordination seemed very good, but it could be better. In too many instances friendly fire was the result of a disconnect between services. That was also a problem with forces of different nations. The British lost more casualties to the U.S. Air Force than to the Iraqis.

I think it is important to re-examine the Unified Command structure to see where these interfaces ought to be redrawn. But even once they are redrawn, it also seems to me that in a specific combat case, the unified commander should be given additional authority for those forces that may be in other Unified Commands immediately adjacent to his own. This should be seen, however, in the context of planning and operations, which I think went very well.

Less connected with the Persian Gulf War, but I think of considerable importance for the long-run operation of our military forces, Goldwater-Nichols has not operated quite so well in the requirements area or in the force structure area. This is not because the act is deficient, but because the implementing directives fail to follow the spirit of the Goldwater-Nichols Act, and also of the Packard Commission report.

The directives in the Defense Department give the militarial acquisition structure a leading role in requirements, and I think that is a mistake. Those requirements ought to flow fundamentally from the unified commanders and from the Joint Staff.

When it comes to implementing decisions once a weapon system has been decided on, that belongs to the services, as does training, recruitment and doctrine, but not joint doctrine. By putting the requirements for functions for systems in the materiel structure, the directives forced the Joint Staff to work on technical designs and weapon systems, and I think that is a mistake.

On force structure, the proper behavior is to start off with the Joint Staff and the Chairman of the Joint Chiefs of Staff, for whom the Joint Staff now works, and get an output from that organization. Then the Secretary of Defense can have independent advice from his own staff and from the services.

I would distinguish here between force structure for the next few years and for 6 to 10 years from now. I think the unified and specified commanders are very good on the force structure for the next 3 years because that is their timeframe. The services would be somewhat better when looking ahead 10 years.

I think requirements should be given in general terms, e.g. we need to kill tanks and so forth, from the Joint Staff. The services should then provide doctrine, examine all alternatives, propose systems. But requirements for capabilities and the choice of tradeoffs between cost and effectiveness should not be in the materiel chain. That should come later.

To come back finally to the plans and operations business, the service staffs dealing with those are still much larger than the unified ones. I would move more of that function to the Joint Staff and the unified and specified commanders. That doesn't mean those service functions should disappear completely but the balance of them should be tilted further in the direction of the joint system, that is, the Joint Staff, the Chairman, and the CINCs.

Thank you very much, Mr. Chairman.

The CHAIRMAN. Why don't we—because you have got to leave, so why don't we have some questions of you before we go to the others.

Do you want to start?

Mr. SKELTON. If you don't mind, Mr. Secretary, I don't understand your last comment. Would you explain that?

Mr. BROWN. The comment on plans and operations, or material?

Mr. SKELTON. Dealing with unified—

Mr. BROWN. I think what I would do is put more of the plans and operations functions than now in the Joint Staff and in the Unified and Specified Commanders. Because as of now, the service staffs and the component staffs and the CINCs are much bigger than the Joint Staff or the CINC staff.

Mr. SKELTON. This may be a holdover, if you recall, where the Joint Staff was not allegedly of an extremely high caliber, the power was not there to do it, and the thinking may still be along that line. I just wondered.

Mr. BROWN. That is a chicken-egg problem. It was certainly the case that it was difficult to get the services to send their best people to the Joint Staff.

Mr. SKELTON. That has changed.

Mr. BROWN. I know it was a problem when I was there and I am also convinced that it has changed. You always had a few stars on the Joint Staff, but when you looked at the O-5, O-6 level, the services didn't send their best people.

I think that has now changed, partly as a result of Goldwater-Nichols, partly as a result of service understanding that if they don't do it, they are going to be even worse off than if they do do it.

Mr. SKELTON. Thank you.

The CHAIRMAN. Other questions?

Let me ask, if you were to concentrate now on any changes, would you make some changes in Goldwater-Nichols? Would you think it is too soon to amend the Goldwater-Nichols Act? What would you do from here specifically, legislatively?

Mr. BROWN. I believe in keeping legislation to a minimum, and one should not change just for the sake of change. I think as the law stands, the Defense Department can make substantial further improvement without changes in the law. Some of the directives need to be changed, but I think the Secretary of Defense can do that without legislation.

I am actually a little concerned that the legislation as it stands has been too easy to misinterpret on the materiel side. But on the plans and operations side, I think it really doesn't need any change at all. Even on the materiel side, I think that the next step should be taken by directive and not by legislation.

The CHAIRMAN. Let me ask another type of question. In terms of your talking about CENTCOM's operational area, and you mentioned the issue of the naval deployments and the Persian Gulf being undermanned, would you change that in any way in terms of the land component?

Mr. BROWN. It would have been, I think, desirable to have a single land forces component commander. I know that is difficult to do because the Marines and the Army have somewhat different capabilities, and to a degree, different functions.

But one land component commander is enough, I would say. Whether that should be an Army or a Marine general, I think depends on the circumstances. I am sufficiently open-minded on that so that the first commander of the Rapid Deployment Force Joint Task Force, which was the predecessor of Central Command, was a Marine general.

The CHAIRMAN. Tell me, what lessons do you take out of this on roles and missions?

Mr. BROWN. Again, I hesitate to draw too sweeping conclusions, because this was a somewhat special case. Air supremacy had been achieved in a couple of days, as was predicted by a number of people, including you, Mr. Chairman, and me, too, as a matter of fact. But that made the question of the priority between close support, the air battle, and hitting strategic targets a lot easier to set.

In another case, I think that the ground forces might have been less well supported in terms of close air support than was the case here. Certainly from everything you hear, the A-10s worked very, very well. Whether it would have worked that well in a situation where the Army had been given back the close air support mission and given the A-10s, as has been suggested by some people, I doubt.

In a higher intensity case, I would have been much more concerned, first, as to whether the Air Force would be devoted sufficient priority to close air support, and second, whether if the role had been given to the Army, it would have worked at all, because in a high-intensity case, close air support aircraft would have a hard time surviving against tough surface-to-air defenses and enemy air-to-air defenses. So that is one thing that I think has to be re-examined, but I am not sure you can get at the correct lesson out of this case.

The CHAIRMAN. Is there some lesson to be learned from the differences between Desert Storm and Just Cause? Do you see any Goldwater-Nichols kind of implications for the organizational-type differences?

Mr. BROWN. I would hesitate to draw conclusions about that difference, because the situations were so different. The degree of notice was different, the nature of the adversary was different.

I think that it may make sense to say this: in the case of Just Cause, it really was a small enough operation so that you might almost have given it to one service, or you could have organized a very specific task force given enough time. Certainly if you had had 6 months the way you had here in Desert Storm, you could have organized a specific task force, you could have trained it, it could have gone in. But we didn't have that much time.

In a very large operation, and Desert Storm was a very large operation, you are going to have to use all the services, and it needs to be a more standard organization, as it was.

Mr. SKELTON. Mr. Secretary, concerning your comments on the requirements process not having been sufficiently revamped in accordance with the Goldwater-Nichols law, I will mention to you that I sponsored an amendment adopted last year requiring a national military strategy report by the Secretary of Defense and assisted by the Chairman. It specifically links the strategy to requirements, and hopefully that may be of some answer to your comment earlier. We will see how it turns out. It hasn't been fulfilled yet.

Mr. BROWN. Yes, I think that will be a move forward. One thing that I think needs to be done is to have the budget, when it is put together, not simply be parceled out to the services, with them continuing to set their service priorities after the strategy has been determined without making it clear how those line up in a modal service. This should help that.

The CHAIRMAN. One more question before you go. Tell me, what is the moral of the story here on high-tech weapons? Give me some judgment about what we should take away from this. Clearly, at least in the public, high-tech weapons are getting a big pop out of this. How should we think about this thing in terms of the old argument of the high-tech versus more numerous, more civil, more reliable argument?

Mr. BROWN. Like everyone else, I concluded from this that I was right, that—

The CHAIRMAN. In this you may have a case.

Mr. BROWN. That high-tech weapons are or can be decisive. Not by themselves, because high-tech weapons without good leadership, without good training, without a lot of practice (and there was a lot of practice here), and without a good strategy and good tactics, aren't going to win.

But if you have two sides and one is much higher tech than the other, even if other things aren't quite equal, the higher tech side is going to win.

I always felt that there were these reasons for high-tech weapons being an approach of choice for the United States. First of all, we had a comparative advantage there, and you ought to work on what your comparative advantage is.

Second, when dealing with the Soviet Union, whose forces are larger in personnel and numbers of equipment, we had to find a counterbalance. We couldn't have as many tanks as they because we weren't going to have as many people in our force as they. Therefore, we had to have better ones. I think that was correct, although we were then talking about a different adversary, one whose threat eased, but might come back.

It also, I think, applies with equal force to conflicts in the Third World. There it will be true that we are not facing three million military on the other side, but we are very far away, and we can't move, next time large forces quickly. Another time, we might not be able to move some people; we might not have the time to move large forces with low or medium tech equipment.

Moreover, our military forces are going to shrink. Both of those points argue that high tech is going to be important even against relatively less sophisticated adversaries.

A second general conclusion is that high tech weapons can be made to work. There is going to be a lot of trouble in testing, and we will read about it a lot in the media and newspapers and see them fail on television. There will be congressional hearings explaining how it is all a result of waste, fraud, abuse, and overreaching, and sometimes that will even be true. But they can be made to work, and they can be made reliable.

We can and should choose to take advantage of technology, not exclusively to improve performance, which is a great temptation, but to improve reliability as well. To use a very old example, jet engines are a lot more reliable than piston engines, even though they are a lot more high tech.

The CHAIRMAN. Sir, thank you for staying beyond the time we said we would keep you.

The CHAIRMAN. Let me next call upon David Jones, and then after that, Harry Train and Bob Herres.

We appreciate, gentlemen, your being here today. Maybe, Harry, if you just move over, that would be fine.

David, the floor is yours, sir.

STATEMENT OF GEN. DAVID JONES, USAF (RET.), FORMER CHAIRMAN OF THE JOINT CHIEFS OF STAFF

General JONES. Mr. Chairman and members of the committee, it is good to be back, particularly talking about a successful operation. I would first like to thank the committee, you, Mr. Chairman, Mr. Skelton, your staff, particularly Mr. Barrett, for being part of the battle to win on the Goldwater-Nichols bill. Remember, there was a lot of opposition at that time, and this committee played a very important role.

Clearly, our operation in Southwest Asia was a textbook operation. I agree with Dr. Brown, that it is not reproducible. I don't think any crisis, any conflict is truly reproducible.

But to me, the world is going to become grayer in the days ahead. This one was fairly black and white. We had a clear adversary, a clear case of aggression. But what you see going on in the rest of the world, it is likely to be more confused as to what will happen and the need to have quick response and to have worked together ahead of time and practice and train and the rest, of all the services working together becomes even more critical. So I think that in the future, Goldwater-Nichols will have even a greater impact than it has so far.

Reflecting on what Harold Brown said, if I rated the before and after Goldwater-Nichols on a one to 10 scale as to how we planned and operated and implemented, I would say before we were about a three. We are about a seven now, and Harold Brown, who was a great Secretary of Defense, is always a perfectionist and he kind of concentrated on the difference between seven and so, and I would like to reflect a little more on the difference between the first three and the seven.

I believe it is good to reflect on where we were before Goldwater-Nichols. The Joint Chiefs of Staff (the four service chiefs, and the Chairman) were a committee that had to by law enact in unanimity. If there was any disagreement, the issue had to be elevated to the Secretary of Defense or the President. That gave each member a de facto veto on what went on. No matter who was on the Joint Chiefs of Staff, every study showed they tended to reduce things to the lowest common denominator where you could get everyone to agree.

The study I had conducted in 1981 revealed that on the Joint Staff, only 2 percent of the officers had ever served on the Joint Staff before, an overwhelming majority had never been on a senior staff, and on the average, the officers only served about 30 months on the Joint Staff position. Senior officers, real critical positions, less than 2 years. So only a handful had any experience, and the senior people had only 2 years at best.

You could compare that with a House of Representatives that was totally composed of freshman Members. Some say that might not be bad. But you can see the lack of experience within the Joint Staff. Also the way to get ahead was to go up through your service channel. It was better to get a service job, rather than to go into a joint system. If you have a joint job, get in, get credit, and get out right away. Therefore, we have a remarkable change in the people involved.

If we had not had Goldwater-Nichols, General Schwarzkopf may not have been the Commander of the Central Command, became the old way was to put your best talent in a service position. General Lee Butler, the Joint Staff J-5 for a long-time is now commander in chief of the Strategic Air Command; that is unprecedented. We see people like General Kelly and others in the joint system; some would probably have been in it, some might not have been in it if it hadn't been for the Goldwater-Nichols Act.

As we look back, in Vietnam I recall working for General Abrams. We fought five separate air wars. He only really controlled one and had some influence on a couple of other wars. It was clearly a lack of interoperability, a lack of jointness, and a need to work things together. We now have the right people in place, we have made great progress on interoperability, and I think we can go further from this.

I find it interesting in getting a post-Iraqi briefing in the Pentagon, and this was specifically by Air Force, how they made a major contribution to what went on and how different it was than the Vietnam War.

There is a lot that is known here in the United States, in the Pentagon and the other commands that a unified commander doesn't know about. Certain weapons, for example JSTARS, and the opportunity to use it. So what you have is a composite group, not just the Air Force, but others dealing with the air problem. Rather than force programs on a unified commander as before, they provided the information and capability and what could be done, and then the unified commander chose whatever he wanted.

I would like to briefly say something about logistics because that tends to be overlooked. Some wars have been lost because of lack of

good logistics. In this one, logistics, although there were a few problems, were very, very successful.

Going back to Vietnam, I remember General Abrams having very little control of the logistics system. It was a push system. You will remember that in the late 1970s we had the exercise Nifty Nugget, the largest postwar mobilization exercise. It mobilized some people, we went through simulation of others, and it was absolute disaster.

With the Army controlling the railroads and ports, the Navy controlled the sealoift, the Air Force airlift. In the simulation Army units arriving at ports with no ships to move them. Washington was establishing the priorities on all of the logistics and the lift capability. We fixed it with Band-Aids at the time by forming the Joint Deployment Agency. You will recall, there was great resistance to any integration of that effort.

In the Iraq War, General Pagonis did a wonderful job in a unified command arrangement. I talked with General H. P. Johnson yesterday, Commander of the Transportation Command. He said that all through the buildup in the conflict, he had almost everybody calling the Transportation Command to ship something, either by air or by sea. All he said was or his staff said was, "Go to the unified command if it is a requirement, and if it is a priority, we will move it. That's the only way you will get it to move."

It worked well. It clearly demonstrated that the concerns of some that the Joint Chiefs—the service chiefs would be cut out of the act was unfounded. They played a very important role, and by not having the committee have to act on every item, big and small, they were able to elevate discussions to the big issues. I am sure they weren't always happy with the decisions, but at least they were involved in the development of the decisions and had clearly had their input.

The question is, where do we go from here? I believe that there are still opportunities within the Goldwater-Nichols Act to make changes. But I wouldn't make any major changes right now in the legislation.

I would make some adjustments in the joint specialty officers. For example, General Horner, who is the air commander in support of the Army and working with the other nations, he doesn't get credit because he is on an Air Force document. The forward air controllers don't get credit. I am not trying to imply you ought to just give credit to those people, but we ought to look at it fundamentally.

Again, I was one who advocated tightness in designating joint specialties because it had been abused during the prior days. As to the broader issues of roles and missions, I believe changes will now evolve.

I applaud what General Powell and his conceptual thinking not of four commands but four basic areas: Atlantic, Pacific, contingency and strategic. Out of this will come a change in the UCP over-time period, changes in the—the greater role given to the CINCs. They will be more involved in the roles and missions areas. I believe that a few years from now we will see considerable change in that direction. So I would caution any big tinkering with the joint system.

But finally, I advocate Goldwater-Nichols II. I use that term figuratively because I think most of the problem is not in the legislation, but in how we operate.

I see in the world success is moving in a direction of decentralization. Market systems are decentralized. I had the opportunity for the last 9 years to be deeply involved in the corporate world, primarily non-defense, and I have seen a remarkable revolution take place.

We have world-class organizations now manufacturing in certain areas has been lagging, but we have many first rate companies. I see success coming from trusting people to work well, and of giving authority to others. But I see in defense more moves toward centralization in control of the budget or the implementation of the budget.

We are a budget-dominated defense organization. I believe there is a changing role for the Congress, a changing role for the Pentagon. With the improvement in the joint system, I think we can take another look at the Office of Secretary of Defense.

There have been two thirds as many general officers in the OSD staff as the Joint Staff. That was built up because of the ineffectiveness of the Joint Staff years ago.

I believe we can get better defense for the dollar and be much more effective. I find it strange we will delegate the decision on the life and death of individuals—the wonderful men and women of our armed services—we will delegate those decisions, but the \$1.98 decisions we tend to control at the highest level. I have no magic solution, but I think we can do much better in this area and raise it from about a 4 to a 7 or 8.

Mr. Chairman, I just encourage all to think at this level. I applaud what you are looking at here because you are not talking today about weapons systems and dollars, you are talking about the basic way we operate and the strategy. I think more of that is needed and less of the detail of working on individual budget problems.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, David.

The CHAIRMAN. Let me now ask Adm. Harry Train to be next, one member of the original Goldwater-Nichols team that worked on this legislation at CSIS and others.

So, Admiral Train, we are happy to have you here, sir.

**STATEMENT OF ADM. HARRY TRAIN, USN (RET.), FORMER
COMMANDER IN CHIEF, U.S. ATLANTIC COMMAND**

Admiral TRAIN. Thank you, Mr. Chairman.

It was my privilege to have been invited to testify on a number of occasions before, not only to this committee, but others, as we approached the decision point on Goldwater-Nichols. I can remind the committee that my first appearance was when I was still on active duty as a sitting CINC, which was somewhat hazardous for a dark-blue-suited Naval officer to follow in those days. I am quite proud of my participation in that which resulted in Goldwater-Nichols.

I would like to go back and reflect on some of my original concerns, concerns which I shared with this committee and with other committees. Those concerns were basically that I did not believe that the authority granted to CINCs was commensurate with the enormous accountability that we held over those CINCs and that the CINCs had no means of satisfying their budget needs even when those budget needs had a direct impact on the fulfillment of their accountability and on the carrying out of their primary missions.

I also believe that the process of assigning an acting chairman in the absence of the Chairman himself created problems for the CINCs in the form of fluctuating and uncertain leadership. I pointed out on one occasion when I was serving as Director of the Joint Staff, specifically during the Mayaguez crisis, we had five different acting chairmen presiding over the planning and execution process responding to the Mayaguez crisis.

I also pointed out that, in my view, the Joint Staff suffered qualitatively when compared to service staffs. All these have been fixed.

I pointed out that the demands on service loyalty often created problems for officers in joint positions and I confess I contributed to that when I was serving on the service staff.

Finally, I pointed out that up to the time of Goldwater-Nichols, the service chiefs were predominantly made up of those who had toiled in the service vineyards. As you remember, the JCS chairmen were historically drawn from the ranks of service chiefs, yet the chairmen were the ones who the CINCs looked to for their leadership.

With the exception of Admirals Radford, Moorer and Crowe, we didn't have any chairmen that had emerged from the CINC process. The Chairman at that time prior to Goldwater-Nichols was in the absence of other uniformed authority, the authority whom the CINCs looked to as their war-fighting commander. But the chairmen had never been one of them.

Those were my concerns and they have all been satisfied. When I had the privilege of testifying, I made the point that if only one of the pending changes that were being contemplated in Goldwater-Nichols could be effected, that change would be the creation of the Vice Chairman. That would eliminate the problem of fluctuating leadership when different acting chairman took over the mantle of the chairmanship during a crisis.

Going on then to my perceptions of jointness as they were reflected in the Gulf war or Desert Shield/Desert Storm, I obviously was not privy to the councils of war and I don't know what type of tensions may have been manifest in the course of the various leaders' debating and planning for the Desert Shield/Desert Storm operations. But from what I could see, it looked like it was, as General Jones indicated, a textbook operation and jointness was manifest every place you looked.

One of the examples, one of the signals that conveyed that message to me was that in the target allocations in the air campaign. They appeared to be right as opposed to fair and equal, that is dividing the targets up among the services. Had those target allocations been fair and equal, I would have been suspicious that jointness wasn't really a part of the planing and execution of Desert

Storm. The fact that the target allocations were apparently right is a big plus.

The mission assignments also appeared to be right and the fact that the Marines didn't land from the amphibious ships is not a negative. They achieved their mission without having to land, without having to take the risks of going through the minefields to make that landing. They pinned down the forces and that was right. The authority granted to the CINC and to the Chairman was appropriate to the need, and the service Chiefs and the service Secretaries were virtually invisible. That is really a plus because their job was only to equip, train, and deploy forces, not to fight. The CINCs fought the forces and the service Chiefs remained invisible and didn't interfere with the process.

What they said and did in the councils of war is another thing. I don't know what happened there. The tyranny of the action office, what is referred to as the tyranny of the iron majors, was not evident. The CINC didn't have to play to the constituent gallery that commanders have had to play to in the past. Neither did the component commanders.

Evidently, when the iron majors attempted to goad their bosses into standing up for their service, the bosses said that game was over in 1986, and Goldwater-Nichols was a solid plus in that aspect. While interservice tensions appeared to be only modest, there appeared to be some interagency tensions, which I can expand upon later if you wish, but not interservice tension. So thoughts on where we might go on roles and missions I think is the next step.

In Desert Shield, we obviously had the right people in the right place at the right time, and those right people in the right place refer not only to those who fought in Desert Storm, but also to the service chiefs, the Secretary of Defense and the service secretaries. If roles and missions are ever to be addressed successfully, it is going to have to be now. We couldn't do it between 1986 and 1990. We may not be able to do it after 1992. If we are going to do it, now is the time while we have the right people that can pull it off. I say that with some enthusiasm. As far as strategy is concerned—

The CHAIRMAN. Why do you think you might not be able to do it? Why is this the right point?

Admiral TRAIN. Because the personalities that are in place now are unique. I know that Goldwater-Nichols is such a powerful force that it has reduced the role the personalities play, but personalities are nonetheless there and those personalities won't be there in 2 years. If we are going to take advantage of this unique combination of personalities, plus Goldwater-Nichols, this is the time.

Mr. SKELTON. Can you pick off 12 or 13 of the roles and missions—

The CHAIRMAN. We will get to that when we get to the questions. We would like others to comment on that point, too. Finish your statement and we will get back to that.

Admiral TRAIN. Regarding strategy, I had the opportunity and the privilege to testify before this and other—and the Senate Armed Services Committee on the subject of strategy. I know that it is a powerful concern of this committee that we eliminate the force strategy mismatch.

I point out that, yes, eliminating the force strategy mismatch is a noble yen, but we should be very careful that we don't repeat the mistake we made when we eliminated the force strategy mismatch with the China white paper back in 1949. At that time we really conned the North Koreans into thinking we had no vital interest in the Orient. It turned out we did.

That is something that has to be in the back of our minds as we address this important subject of the force strategy mismatch. Ideally, I believe that we should structure the unified command plan so that we have the right mission for each command. I think the direction that the Chairman of the Joint Chiefs of Staff is taking at this time is quite appropriate to that need. Once we have the right missions, I think we should then tell the CINCs what they are accountable for under the strategy resulting from the unified command plan revision. We should then give the CINCs the authority to request the forces and assets they need to carry out the strategy.

If we can't provide the assets we go through an iterative process and say we have to change the strategy because we can't give you the forces. The iterative process can go on until we end up with CINCs that are satisfied that their accountability matches the assets that we give them.

I will remind you that as we go through this, it would be useful if there were some cataloging of vital interests even if that catalog has to change every day. Back in May of 1950, South Korea was not a vital interest to the U.S. But it turned out to be a vital interest in June of 1950. So it can change day to day. But we don't seem to have any organized way of cataloging vital interest and the CINCs who are out there defending "vital interests" aren't sure what they are. We went through the Vietnam War with Vietnam never being a vital interest of the U.S. Yet we behaved as though it were.

As far as joint doctrine is concerned, I have been observing that joint doctrine development closely as it has gone on. It is my personal view that the best place to develop joint doctrine is on the unified commanders staff and the joint schools. The worst place to do it is in the services. If we do assign that chore to the unified commanders, they need the assets commensurate with that chore.

A final point, and I think perhaps among all those at this table, I am best equipped to comment on it, is the CAPSTONE course. One of the things that emerged from the Goldwater-Nichols legislation is CAPSTONE. I have now worked with 19 CAPSTONE courses, observed the process from the very start-up to today, and I would like, in a minute or two, to share with you some insights into that CAPSTONE process.

We tend to think that strategic thinking has to be stimulated through an academic program. I would share with you my observation that CAPSTONE was the ideal way to stimulate strategic thinking in that you exposed the CAPSTONE Fellows to virtually every strategic thinker and strategic planner, not only in the U.S. armed service forces and governmental structure, but also in NATO and in the armed forces and leadership of Japan and Korea.

That strategic thinking was stimulated for the CAPSTONE fellows through face-to-face contact with service chiefs, with CINCs,

with virtually every CINC in the system. They have face-to-face encounters with the CINCs, they can challenge them. They have the opportunity to hear first-hand what that accountable authority is thinking and get an insight into his strategic thinking.

I think that is far more important than placing these CAPSTONE fellows in an academic environment where they listen to lectures by professors who analyze what previous accountable CINCs and officials thought on strategy and then follow that up with perhaps a research paper that is scholarly, fulfilling an academic requirement.

I think CAPSTONE is ideal right now and base that on 19 successive CAPSTONE courses that I have participated in. There are some notable CAPSTONE alumni; Gordan Sullivan, the Vice Chief of Staff of the Army; Jerry Johnson, Vice Chief of Naval Operations; Lee Butler, CINCSAC. The press spokesman at Desert Storm, Dick Neal, was a CAPSTONE alumni. That covers all four services for the record.

I think the basic issue is whether CAPSTONE should continue to be an exposure course as it is now or whether it should be changed to a lecture, take notes and read and write a paper course.

There is another option, an option to create a strategic planning group. I think that would be useful, but CAPSTONE fellows will have to be there longer if you are going to use them for that chore. I am not sure that their availability would be that easily gained in a time of shrinking resources. I think the biggest pay-off is the dynamic of CAPSTONE, itself.

Thank you, Mr. Chairman.

The CHAIRMAN. Admiral Train, thank you very much.

Next we have a person who did hold the job as you were saying that it is important to create the Vice Chairman and that is Bob Herres, the first Vice Chairman of the JCS.

General HERRES. Thank you, Mr. Chairman. I appreciate the invitation.

I apologize for being late. Sometime over the last 14 months, somebody tore up all the streets here. Traffic is now like this in San Antonio and I am having to drive myself instead of having a staff driver so I was late.

I would like to point out that I have not been involved in a lot of activities that would have kept me up-to-date on what is going on in the war. My knowledge was largely derived through watching CNN and ABC, so I am not very well equipped to say that A or B or C happened or didn't happen because of Goldwater-Nichols.

I can read between the lines on a lot of activities, and I think I can address issues that might be helpful and useful to you.

Judging from what Arch told me in advance, I thought it would be most useful if I sort of talked briefly about how I saw my role and what I tried to do in the 3 years that I was there because I did come to town with some pretty specific ideas and they were based on things that I had observed as a member of the air staff serving under General Jones and during the transition when he went from being Chief of Staff of the Air Force to the Chairman's position.

As a member of the Joint Staff under General Vessey from the perspective of our role as CINC space, CINC NORAD, CINCAT and the guidance that I got from the Chairman.

As I saw Goldwater-Nichols, the most fundamental purpose I thought was to construct a better balance between the two chains of command that have been built into our defense establishment, the original chain of command on the one hand running from the Secretary through the Chairman as the chain of communication, but in those days the Joint Chiefs of Staff, to the CINCs and on the other hand the resource management of the force structure and chain of command through the service secretaries to the services themselves.

I think Goldwater-Nichols did a very good job of rebalancing the scales. That was really a remarkable—when you take all the other details and set them aside, and you look at the challenge that lay ahead of the architects of the law and when you are looking at the world's biggest bureaucracy, and to be able to put together legislation that would readdress that balance and make it come out about right is to some degree a shot in the dark, but you all got some good advice, studied the issues very carefully, listened to a lot of people.

I was happy to be one of them as a CINC and one of the persons who I think the record reflected favored some change. I don't think there were many of us at the time that were on active duty and I think it came out extremely well.

Well, when the Chairman told me that he was going to nominate me for the job, he started out by saying, I am going to ruin your life for you and bring you back to Washington, and I thought I had died and gone to heaven when I went to Colorado Springs, so I sort of agreed and that.

His main point was there is just a lot of things around here that are not getting done that need to be done, and that was kind of the bottom line of what the Vice Chairman's job was all about.

It is not like I was going to go there and move some Chiefs over and displace their roles and influence. It was not like there were people in the Joint Staff or in other roles that I was going to take over their responsibilities or their turf. There were just a lot of things that the Chairman was expected to do that you all looked to the Chairman to be answerable for that others in the department and other agencies in town looked to him to be able to cope with, and he just couldn't do all that, not to mention the leadership that Admiral Train referred to that the CINCs expected the Chairman to display for them.

So I was going into the job from that standpoint that I looked at the kind of things that needed to be done and then tackle the job.

Fortunately, we had a pretty good menu of things to do. Your lawyer said the Vice Chairman shall perform the duties of the Chairman in his absence or disability and such other duties as the Chairman may be prescribed with the approval of the Secretary of Defense, so a list was put together.

We worked with that list of duties for a while and then we institutionalized it with the signature of the Secretary or the recommendation of the Chairman. That list can be made available. I don't have it anymore, but we reratified that again when Colin Powell replaced Admiral Crow, very minor changes so it would stand the test of time. I assume that it is still in place and operative.

The most important job was to perform the duties of the Chairman in his absence or disability. The result of that was continuity, and several people remarked within relative—a few months after I came to town—about how much better it was at NSC meetings to see the same face each time when the Chairman was gone.

Another advantage of a separate Vice Chairman substituting for the Chairman in the place of one of the Chiefs is that in that role the Chiefs always had one foot in the other camp, and no matter how conscientious a Chief might be in his role of substituting, he had a lot of other things to do.

He had a schedule and staff making great demands on him, you people making demands on him and he tended to put water on the biggest fires so he was in and out all the time.

As Vice Chairman, I probably spent as much time in the Chairman's office as I did in my own. The beauty was when I went to a NSC meeting, there was never a doubt how the Chairman would come down on an issue because I knew how he thought. We reflected together on issue after issue.

I knew how he approached problems. I could get into his mind because we did spend so much time together, and I could sense when he wanted me to take an issue and go with it and leave him alone and when I needed to come back to him for guidance.

The best part about it was I always had a high degree of confidence that I could represent the Chairman well because we understood each other so well. Continuity was clearly the most important benefit of all of this.

In the two most important arenas, one, deliberations of the NSC representing in the Chairman's absence, which was 30 some percent or so—we figured it out 1 day—about 30 percent of the NSC meetings I ended up representing the Chairman.

The second arena was in the JCS and chairing JCS meetings. Again, this close relationship that we built because I don't have other duties like the foot in the other camp, was of great benefit in chairing JCS meetings.

I must tell you that when I chaired my first JCS meeting not long after I came to town, I was welcomed most warmly by the other Chiefs. They had fought their battle. It did not come out the way they wanted it to and that was behind them, and I think there is a big lesson to be learned. They saluted and smartly marched off and implemented the law as it was written. I was never, ever that I knew of undermined by any of the Chiefs in my role as Vice Chairman. I think they deserve a great deal of credit, that group of Chiefs, for helping make Goldwater-Nichols work.

The second thing that I think best—the best way to sum up the rest of the duties and the roles I performed, without going through a lot of them in detail because you could pursue those with questions, with regard to the rest of my responsibilities, I think that is best described by saying that I perceived myself as being responsible for extending the influence of the Chairman in the many fora in which he just didn't have time to participate. Most notable of those were the Defense Acquisition Board, Defense Resources Board in institutionalizing the Joint Requirements Oversight Council, the Nuclear Weapons Council, National Foreign Intelligence

Committee, which came later, and the National Space Council, for example.

The Chairman really never had time to go to many of those meetings. Again, continuity was a factor because the other participants in these fora were comfortable knowing that I was there and it was the same guy. There was continuity with understanding of the issues. You didn't have to bring somebody up to speed each time about what happened at the last meeting and there was also—and this was another subtlety that is important to understand—there was also recognition, I think, in fairly short order around town that Admiral Crow and I were close, that we did spend a lot of time together, that I did understand his views and that when I said what I thought our position would be on something I didn't have to have people running out of the room to call the Chairman's office to make sure I was telling them the right thing. They believed me and there was a credibility that derived from that relationship.

I was concerned about whether or not that would be the case, particularly in the Pentagon. That is an interesting building with a lot of interesting people in it, and you wonder how that is going to work until it happens.

In the Defense Resources Board, which I think was the acid test, I represented the Chairman probably 80 percent of the time at Defense Resources Board meetings, and the continuity there was extremely important.

In that regard I have to congratulate some things that Secretary Brown said, because I don't think he realizes the extent to which we went in getting the operational world into the requirements definition and the requirements management and the allocation of resources business.

I agree with all the things he said about the need for doing that. I just don't think that he is aware of the many steps that we had taken. The DRB, of course, is one of the most important of those. The Chairman just couldn't go to all the DRB meetings. In fact, there were few of them that he really had time to go to.

I went to all of them. To the credit of the secretariat in the Pentagon, an exception was made for us that was not made for any of the under secretaries or assistant secretaries—if the principal could not come, his deputy was not allowed to come, and that rule was implemented a few years ago when there was some—there was a little bit of problem getting some of the people to attend. They said if you don't come you are not going to be represented.

In our case, I was always allowed to come and represent the Chairman and treated as a full member, and when the Chairman came, I was also allowed to come. I was the only deputy or substitute, so to speak, in the DRB for which that was the case, which I think was a very remarkable exception.

The reason that was important is because that gave us continuity in exerting influence in the DRB, which is related directly to the point that Secretary Brown made about having that operational chain of command, the spokesman for the CINC and the operational manners being more influential in the resource allocation, the force structuring process.

We made an enormous amount of progress there and the Chairman's influence is paramount in the process. It is not as well understood in the building as it might be, but the Chairman's influence is paramount and down to the last few toughest decisions in putting the budgets and the programs together, not only was the Chairman at the Secretary's right hand when those decisions were made, but I was there also. I was invited.

I do think that the people who were in place in the Pentagon deserve a lot of credit for making all that happen and helping make the Vice Chairman's position a meaningful position, playing a meaningful role.

I could talk a lot about the role of extending the influence of the Chairman. It is a subtle point, but it is extremely important, and it has had far-reaching impact.

The third role that emerged more sharply after the new Admiral came in was involvement in the crisis management process. I know there was concern in other places in town that maybe the Vice Chairman would get absorbed by the change that prescribed the deputies committee and its role in crisis management. That didn't happen.

That role pretty much complemented my role in substituting for the Chairman and his participation in NSC deliberations and really bonded the whole system more tightly together. But it is an important role that the Vice Chairman plays.

Another important role that worked out well is participating in JCS meetings. I participated in all of the meetings unless something demanded that I be elsewhere. Occasionally something would happen at the same time a JCS meeting would take place. It was rare, but occasionally happened.

I advised the corporate body which advised the Chairman and offered my advice, along with everybody else's, and it was not a difficult problem. Some expected that to be a problem, but it was not. I was a full-fledged member of the advisory team that helped the Chairman shape advice for the President, the Secretary and the NSC, nights, weekends, at Camp David, wherever.

One other important thing which a lot of people thought the Vice Chairman would do most of the time, I helped the Chairman with his proforma and ceremonial role. I spoke to every CAPSTONE course that went through, went to war college, helped with promotions and hosted counterparts, just Chiefs of Defense staff of other countries around the world, they come here by the dozens and somebody has to meet them and spend time with them.

The Chairman, for example, is expected to do a lot of that and he can't. So I could take probably 60 or 70 percent of that load off of his shoulders and still do other things and that helped the Chairman a lot as well.

Those are the kinds of things that we did, the kinds of contributions we made. Of all of the things that were achieved, though, I would say the one that I—upon which I place the highest priority as far as making something happen is concerned, it was the institutionalization of the Joint Requirements Oversight Council.

The Vice Chiefs of each of the services I chaired—this was the forum which we developed to provide the Chairman the advice that he would need. In most cases, we just went ahead and took action

on requirements. We were the filler for the CINC requirements and we established a role of monitoring requirements, providing recommendations to the under secretary for acquisition, and doing just what Secretary Brown said awhile ago needed to be done.

But those things take time. Perhaps we didn't move as quickly as a lot of people expected, but this is a big bureaucracy and if things worthwhile are going to be done with some degree of permanence, they have to be done carefully, and I think what we did has withstood the test of time.

The CHAIRMAN. Before we proceed, let me call on Glen Browder. He is the successor to Congressman Nichols in the district from Alabama.

Mr. BROWDER. Thank you, Mr. Chairman.

I congratulate you for holding this special hearing on Goldwater-Nichols goes to war and I appreciate the opportunity to make some remarks.

The first purpose that you have outlined for this hearing is to review the purposes and objectives of Goldwater-Nichols as seen by some of the original proponents. I was not a Member of Congress during the development and passage of the Goldwater-Nichols Act. The third district of Alabama was represented at that time by the Honorable Bill Nichols, the father of this act. It is my humble opinion, however, that the best way to accomplish the hearing's objective and the proper way to serve history and legacy of Bill Nichols is to represent to you the thoughts of my predecessor about the history and purpose of this monumental legislation.

Therefore, Mr. Chairman, I would like to recite the words of the late Congressman Bill Nichols, delivered to the House Armed Services Committee in 1985 and the full House of Representatives in 1986, the year of passage of the Goldwater-Nichols Act. I have the transcript of those comments and with your indulgence, the statement of Honorable Bill Nichols, a Representative from Alabama, Chairman, Investigations Subcommittee.

It is my privilege to report to the Committee on Armed Services today H.R. 3622, the Joint Chiefs of Staff Reauthorization Act of 1985. The first thing that should be said about this bill is that it is third generation Joint Chiefs of Staff legislation. This committee reported and the House passed Joint Chiefs of Staff Reauthorization legislation in both the 97th and 98th Congress. I believe we are now about to do it again and we will continue to do so I hope until we achieve meaningful legislative reform of the Joint Chiefs of Staff.

I mention the history of the Joint Chiefs of Staff bill for two reasons. First, the original author of Joint Chiefs of Staff legislation was a distinguished former member of the committee, the Honorable Richard C. White of Texas. His contribution should be recognized today. He, like most of us I suspect, was not familiar with the intricacies and complexities of the U.S. military structure when two of the three members of the Joint Chiefs of Staff sounded an alarm in 1982, warning that the prestructure is seriously flawed and could lead to disaster if tested in war time.

Chairman White was, however, very familiar with the Constitution. He knew that it makes Congress solely responsible to raise and support armies, provide and maintain a navy, make rules for the Government and recognition of the lands and naval forces. Congressman White knew that the Constitution assigns Congress the responsibility for the organization of the national defense establishment, and because the Investigation Subcommittee had jurisdiction over organizational matters, he realized that he was responsible in the first instance to the House for carrying out this constitutional mandate.

It is also fitting to call Member's attention to the fact that this committee was the first governmental body to recognize and call attention to defense organization problems to support reform. That is the second reason I am taking the time of the com-

mittee to discuss the history of the legislation before us. I wanted to remind Members of the constructive and farsighted role played by the committee on this issue. In my view, it is our finest hour in the years I have been privileged to serve on this committee.

Now, let us turn to an explanation of the Joint Chiefs of Staff reorganization issue and then to the legislation before you. Why is it necessary to alter the structure of the Joint Chiefs of Staff? What, in short, is the problem? The problem, then, based on the testimony is that the Joint Chiefs of Staff, by law the principal military advisor to the President, the National Security Council and Secretary of Defense, is a committee composed of coequal individuals, four of whom represent strong, often conflicting service interests.

There is considerable testimony indicting ability in contradiction between the responsibilities of an individual as a member of the Joint Chiefs of Staff and as Chief of his service. Does anyone here believe that the Iran hostage rescue attempt would have been planned and executed as it was with all four services involved if the Joint Chiefs of Staff were not structured as a committee of five coequal members? The chain of command to the Marines at the Beirut Airport where 241 young men died in a terrorist bombing extended through seven intermediate military levels. Grenada action reports cited poor interservice corporation as a primary cause of major foul-ups. I think you will agree that the present Joint Chiefs of Staff structure has problems that should be corrected.

Let me now turn to an explanation of how H.R. 3622 would attempt to correct the problems I have outlined. The bill would alter the way joint military advice is developed and the responsibility for performing other joint functions by strengthening the Chairman of the Joint Chiefs of Staff, making him the principal military advisor to the President, the National Security Council, and the Secretary of Defense.

The Chairman of the Joint Chiefs of Staff is uniquely qualified to assume additional responsibilities as an advisor, championing the unified military view point. He is the only member of the Joint Chiefs of Staff that has no service responsibilities. Although Chairmen continue to wear the uniforms of their services, experience has shown that they have traditionally assumed a joint or unified perspective in evaluating military issues, unbiased by former service ties.

Mr. Chairman, I would like to close by citing a few other comments by Mr. Nichols that demonstrate his style and that indicate the broad-based bipartisan long and tough work ahead if we are to accomplish the third objective of this hearing, determining what needs to be done.

Mr. Nichols before the full House on August 5, 1986, made these comments:

Members may wonder why I would offer as an amendment a bill with a title that bears my name. The explanation is that the Committee on Armed Services chose to rename the bill after me when it was reported to the full committee by the Investigation Subcommittee, which I chair. You will have to ask other members of that committee why they chose to rename the bill. I can only say that I have considered Department of Defense reorganization unfinished business since the day I became Chairman of the Investigation Subcommittee in 1983 and have worked since that time for this day to come. Consequently, it is difficult for me to describe the mixture of humility and pride with which I rise to introduce this motion, humility at having been so honored by my colleagues while realizing that so many of them have contributed to this legislation and also deserve to be honored. Pride in the secure knowledge that I bring to this House legislation of the highest importance, touching on our very survival as a Nation, that is in the words of the Constitution intended to promote the general welfare and to provide for the common defense.

But let me hasten to fill in the list of those who also deserve credit and recognition for the legislation I propose as an amendment to the authorization bill. The Chairman of the committee, Representative Les Aspin spent a great deal of his personal time last winter sifting and studying the recommendations of past days. Since becoming Chairman he has emerged as a major force influencing Defense Department organizational reform.

Representative Ike Skelton has played a similar role for an even longer period. I especially want to express appreciation for the assistance and support of the Ranking Minority Member of the Investigation Subcommittee, Representative Larry Hopkins.

The list goes on. The Senior Senator from Arizona, the Senior Senator from Georgia, Bill Dickinson, the Ranking Minority Member of the committee, Representative Nick Mavroules, John Spratt, Dave McCurdy and John Kasich. Most of all, however, the legislation is the product of members of the Investigation Subcommittee over the last three Congresses, who have collectively heard over 100 witnesses and I might add an editorial comment. I don't think Congressman Nichols would object if I added Arch Barretts' name to this list and many others.

I will stop there.

Mr. Chairman, I think the purpose of the legislation and origins that Mr. Nichols outlined can be very useful to us in lessons learned and his style can be very useful to us in looking at where we go from here. Mr. Chairman, I am sure that Bill Nichols in spirit, wooden leg and all, is watching now and he is smiling.

Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Browder, thank you very much.

Ike Skelton, to renew his question?

Mr. SKELTON. First, I would like to thank our friend from Alabama for the most proper comments about our late friend, Bill Nichols. Your comments brought back many memories of those, frankly, uncertain days where we felt like anyone that wore a star on his shoulder from any service was fighting what we were trying to do. I wish he were here today to hear people with stars on their shoulders rush to tell us what a fine piece of legislation Goldwater-Nichols is. It is a fitting and lasting tribute to him and I thank you for your kind words about him. It was a thrill to work with him through the years.

Roles and missions. I understand that roles and missions were defined somewhat narrowly back in 1948. To my understanding it has not been revisited since then. Where do we go from here in as few comments as possible because I have other questions?

Admiral TRAIN. I believe the Key West Pact in 1948 was a necessary compulsion that resulted in some enduring decisions that have served us well in the ensuing years.

Since 1948, we have created a system in which all forces are fought through unified commands, and the essential element of the unified command structure are the components, the land components, the air component, the naval component. I believe that it is appropriate at this time to ensure that the roles and missions that have emerged from Key West fit the requirements of the unified command structure and that when the unified commander wants to identify an accountable component commander and reach out and grab him and say this is what must be done under these circumstances, he is only looking to one man, not to two or to two and a half.

It is going to be more complicated than it sounds. We did demonstrate that it is possible to have a bona fide air component commander in Desert Storm and that commander can issue a single ATO that covers the activities of all the aircraft involved in the air war. But it is more difficult to say you can do the same with ground forces.

I believe you can. But you have to understand that a land force is one thing, a landing force is another. The landing force when it is embarked on the ships is part of the naval force, not part of the land force. When the landing force gets on the ground, it is part of the land force. So that is a nuance that needs to be preserved, as

we go through the process of reexamining roles and missions. But I think it can be done and now is the time to do it.

Mr. SKELTON. As I recall the history of the 1948 Key West agreement, it was an interservice battle as to who does what, particularly over the role of close air support. The atmosphere then was the pre-Goldwater-Nichols atmosphere of the services in essence fighting the services. The atmosphere today is much different and an approach to this hopefully would be better received by each of the services. Maybe that is something that we should look at.

General Herres, I was going to ask you the very question that you have already answered, what do you do? We remember those days when your job was on the line. It was very much in question. People with whom you worked later weren't too eager to have you. It worked out well and I compliment you on being the first Vice Chairman of the Joint Chiefs of Staff.

Along that line, let me ask you, General. I have heard either directly or indirectly some complaints that the civilian side of the Pentagon has a disproportionate amount of influence on the decisions that are being made as opposed to military decisions. You would be in a position to know that. Needless to say, that comment does not come from the civilians. But has that gotten out of sync?

General HERRES. No, sir. I think we have readdressed that imbalance somewhat. I would say that might have been a problem a while back and I don't think it was really an overt intent on Goldwater-Nichols to maybe readdress that balance, but I think we used the opportunity of Goldwater-Nichols to fix some of that. I alluded to that a little bit but let me touch on that in a little more detail.

By creating a Vice Chairman, and implying that he should play a role in influencing the acquisition process, I think you open the door. First of all, you gave a four-star who was close to the top of the decisionmaking process and someone with time to get into that process and exert influence, the power to exert the Chairman's influence. This is where I emphasize extending the influence of the Chairman.

I think that while pre-Goldwater-Nichols, there was an inordinate amount of influence on requirements that originated more often than they should have in the service staffs and components than in the CINC's staff, and were then massaged by the civilian side of the House in OSD. I think we were able to alter that by blending the process that we institutionalized through the deliberations of the Joint Requirements Oversight Council and the Defense Acquisition Board.

Where I tried to exert the strongest influence is at the milestone zero and the milestone one and, to some degree, milestone two points in the system's acquisition process.

One of the reasons you don't see a lot of effect from all that effort—there was considerable effort, believe me—is that it takes time for these things to develop. We had programs that were already underway. We are not going to convene JROC meetings and turn around a bunch of requirements where you are already bending metal on programs.

I tried to institutionalize the notion and I think I succeeded pretty well, the notion that requirements would be validated by the JROC and not by the Defense Acquisition Board, which is basically

the material side of the House that the Secretary referred to earlier.

I was the only uniformed member of the Defense Acquisition Board, but I was the Vice Chairman. That meant that when the Under Secretary for Acquisition was not there, nobody else could be the Chairman, but me. I was literally the first among equals at the table, sat at the end of the table with the Under Secretary.

When the DAB proceeded to get into the requirements issues at milestone zero and milestone one deliberations, I would blow the whistle, say time out, that is a JROC issue. We will take that one, address it and come back to you. I would convene the JROC, address the issue. We would agree on the language of a letter that would go to the Secretary.

What is important there is that we rolled the CINCs into that, too. We got every involved CINC to comment on every requirement, request or letter, requirement related piece of correspondence that we sent to the Under Secretary for acquisition. We frequently brought in the CINC; frequently the DCINC or Vice CINC would come in and meet with the JROC on an issue. But it takes time for that to develop. We figure we would go after programs that are at the milestone zero, milestone one point. That is the right time to influence requirements, not after you have invested a lot of money in hardware and it costs you a lot of money to change things.

Frankly, in straightforward terms, the name of the game was get the third floor out of the requirements writing business and get the CINCs and the uniformed military people representing the war fighters in the business of writing the requirements and monitoring their implementation until the program was off and running. Once you got past milestone two, our role, I felt, was relatively small, because then it was a matter of monitoring the business end of acquisition.

I use that as probably by far the most important example of readdressing that imbalance that you might have perceived existed. It also gives me an opportunity to address the points that Secretary Brown raised, because I think he is a little out of date on what all has happened.

We didn't do that with a lot of fanfare, so perhaps not as much is known about that process as should be. I said at the beginning of my tour, if I don't get one thing done in the next 3 years—if I don't get this JROC institutionalized so it can do what people have looked to the Joint Chiefs of Staff for years to do, and that is be the leaders in the requirements development and validation process—then I will not have considered my job complete.

General JONES. May I add a point.

I think a lot of progress has been made in the JROC in the requirements area, but a requirement developed and validated unless funded doesn't mean a great deal. The real key is in the priorities of the funding to meet the requirements that have been set out.

Traditionally, because the joint system really didn't play its role over many, many years, the most influence within the building with regard to those decisions on priority funding come out of the Comptroller's office, sometimes working with system analysts. That was the scenario I was referring to. Secretary Cheney is doing a

marvelous job under a rigid bureaucratic system that is very hard to change even if you are the Secretary of Defense—but because the joint system didn't do the work in the area of priorities, the influence moved into the OSD staff, particularly the Controller.

I would like to see more of force requirements shift to the joint system. Clearly OSD has the major role in establishing the policies and oversight of insuring these policies are followed.

The conceptual priorities—not the priority of weapon system A versus B. The priority as to the type of military we want. The ultimate decision with the Secretary of Defense acting in concert with the Chairman.

General HERRES. The arena General Jones brought up is the arena of the DRB. I addressed earlier the extent to which our influence was considerably bolstered in the Defense Resources Board. No amount of legislation is going to change or dictate to the Secretary who he is going to listen to when he has to make those tough prioritization decisions, but until the time I left—I worked for three Secretaries in that position and two Chairmen—until the time I left, I never saw the Chairman lose one on prioritization of requirements.

When we got down to the point where we said this is the one that has to go, we had a lot of tough calls. It was just as hard for us to make the call and a lot of times the Comptroller or PAE guy was just as right as we were when the arguments went back and forth. But a dramatic amount of progress has been made in equipping the Chairman. General Vessey did a lot in this regard. But the Goldwater-Nichols equipped the Chairman to go to DRB meetings prepared.

General HERRES. Joint Staff spent a great deal of time in working those kinds of issues, preparing the Chairman for the DRB, where the prioritization decisions are made, where the decisions are made, or at least all the advice on the table. He thinks about it some more, and talks about who he wants or needs, and sometimes talks to some of you all, and makes a decision. So it makes it bad.

But I think the structure is there. It does need to evolve, and it does need to mature. I think the progress that has been made is not quite as recognizable, but you are healing this wound one skin layer at a time, from the inside out, and it needs to be given time to grow.

One of the changes I would make to help in that process would be to give the Chairman the three-star manpower space so he could make the J-7 and the J-8 three stars. That is the one thing where I felt most handicapped.

For example, today the Chairman is out of town. The Vice Chairman has to do all these kinds of things which I described, which is a busy schedule for anybody, and he has to pick up whatever the Chairman would have had to do today, had he been in town.

When the Chairman was gone, I was very busy and very tired when I went to bed at night. So that is a tough deal.

I couldn't go to, for example, DRB meetings if some one decided they were going to have a meeting in the White House and the Chairman was gone. So I would have to send a substitute. Well, the director couldn't go because he was too busy and not as current on

that issue as he needed to be. But the director for that issue, usually the J-7 or J-8 needed to go in my place.

So we needed to send a one-star or a two-star in my place. That makes a difference. It makes a difference in the eyes of the civilians.

Mr. SKELTON. It shouldn't, but it does.

My last question, Admiral Train, you touched on a response. You said the worst place, if I recall, to develop joint doctrines is in the services. We have done some work in the military education field in the last few years, are you suggesting we should develop joint documents in the joint schools?

Admiral TRAIN. Yes, I think that would be a very appropriate place to develop it. Of course, within the unified commanders structure, or the Joint Staff, as a matter of fact, if they have the assets to do it.

But to designate a service as the service responsible for developing "joint doctrine" is almost a built-in conflict of interest to begin with.

Mr. SKELTON. Thank you.

The CHAIRMAN. Let me just ask all of you a question that I asked Harold Brown, and that is, at this point, would you recommend any change in Goldwater-Nichols?

General JONES. I would not, except on one point. I believe there is a great opportunity left to use the tools that are provided by Goldwater-Nichols. I have got great confidence in Secretary Cheney and Colin Powell in using that authority, particularly now with how successful we were in Southwest Asia, with the recognition that integration of effort was so important.

I think they have an opportunity now to make further changes. So I would let this area—

The CHAIRMAN. So you would not make any change—

General JONES. Except in the Joint Specialty Officer limitation but no, not in the bill.

Admiral TRAIN. I agree with that comment in its entirety.

General HERRES. I said this before I left, I think you ought to clear out the loss, and make the Vice Chairman in the law a member of the Joint Chiefs of Staff. It is interpreted that he is a member only when the Chairman is gone.

I think that is kind of silly. It is as much form as it is substance. The Vice Chairman is treated as if he were a member by his colleagues, but the Secretary, by everyone else.

I know there is a concern that if you get a rogue Vice Chairman in there, maybe there would be some problems. But the Joint Chiefs of Staff don't vote anymore there. It is not a structure within which they vote. There is this perception that they vote.

Those were the olden days. Those are gone, and there is no way for that to happen. But this—there is a confusion on the part of a lot of people about exactly who the Vice Chairman is and what his role is.

But the way you have got that law written now, he is a member of the Joint Chiefs of Staff when the Chairman is gone, and it is all very fuzzy when he is not. I think you ought to just clean that one up. It isn't going to have any big impact.

Second, the three-star position I mentioned, the doctrine question you raised, we have tried that a number of ways. General Vessey tried using some tactics doctrine and techniques, development roles from REDCOM, when he was Chairman. I thought that was a good idea at the time. That didn't work. We tried a lot of different things.

Joint doctrine has got to be done under the supervision of the Joint Staff, and that is a major role for the HJ-7. It needs to be a three-star as well. You might be interested in knowing that our first J-7 came in as a one-star, was promoted to two-stars on the job, who formed J-7, came in at the same time I did, about a month later, was Lt. Gen. Fred Franks who was a commander in Desert Storm. He did a great job in building J-7. But it has got a long ways to go.

The statute has to be developed. It doesn't mean that the nitty-gritty work of developing joint doctrine can't be done other places, under the guidance and supervision of the Joint Staff, with the Vice Chairman overseeing all of that.

The third thing I would do, I would add—a comment I would add on change, certainly there was a proposal to allow the service to designate a certain limited number of positions along the lines that General Jones just mentioned. I don't know whatever happened to that, whether it ever came over here in a formal proposal or not. But the services wanted to do that.

They wanted to sell somebody like a joint component commander, and so forth. They could designate a certain number—maybe 40—of positions. But I think you have to be careful. I would put a ceiling on how many they can designate that don't meet the joint criteria that you have established. I would add one caution on this business of land component commanders in the Marines and this constant conflict.

I think Harry Train touched on it, and I would like to reemphasize what he said. You really ought to think of that Naval component commander as your maritime component commander. Naval, of course, technically means the Navy-Marine Corps team, but not everybody understands that. You have given the CINC the authority to organize any way he wants to.

It is very clear to me, and I have heard things from the industry to substantiate it, that that is exactly what Norm Schwarzkopf did. To have one land component commander and artificially put the Marines under that commander could be a big mistake. It has got to be what the CINC needs and what he wants. There is a very delicate transition from the forces afloat to the forces ashore during combat in an opposed landing.

The CINC may very well want a maritime component commander in charge of that whole operation. Then at some point later on he might decide he is going to transfer his Marines ashore when they penetrate some distance to the control of his land component commander. But you have done what needs to be done. I don't think any changes are needed there. You have have the CINC the authority and responsibility to organize as he sees fit.

General JONES. Of all the points that Bob just made, the only one that really needs modification to Goldwater-Nichols is the role of

the Vice Chairman and being a member of the Joint Chiefs, and I endorse that.

Clearly we don't need anything in legislation on where the doctrine should be developed. Everybody ought to have input to it.

Of the services, the CINCs, the schools ought to have input into it, but clearly the Joint Staff has to be the developer of the basic guidance and of the documents. I think it is worth looking at the J-7 and J-8 as to what their roles should be and how much. But that is outside the Goldwater-Nichols.

The CHAIRMAN. I hear you.

You all have heard what the shortcomings, or the modifications as you put it, General Jones, that Harold Brown was talking of, going from a seven to a ten.

What comments do you have about the shortcomings that he was talking about, that gap of things that need to be done now, which Harold Brown also agreed with all of you, that essentially should not be done in legislation but should be done in changing the directives.

General JONES. I believe a lot can be brought about by cultural change as more people in positions of influence go back and take a look at what is going on.

For example, in commanding, when I was the air commander in Europe, I had three bosses, a NATO boss, a unified boss, and a service boss. The one who had by far the most influence on me was the service boss because he promoted my people, gave me my people, and gave me my money. That balance is still in that direction within the unified commands.

There can be some changes in that regard, that would help develop the component commander becoming broader than mostly service-oriented.

On the other points that he makes, clearly if the legislation is there to move closer to the 10. But I agree the Joint Staff should not be deeply involved in acquisition process.

A major player in requirements, a player in acquisition, but as Bob said, at a certain point you drop off for it becomes a management job for OSD, and the services.

But I think basically the legislation is there to make the necessary changes. Clearly, there are priorities that the Congress has put in higher priority than the Pentagon, and in a number of cases you were absolutely right, for example, lift, sealift.

We bought the eight SL-7s despite a lot of resistance. I think certain areas that tend to be stepchildren, that the Congress has to watch very carefully and work a priority on.

But again, I think most of these can be involved without any change in the Goldwater-Nichols Act, except for a couple of points, I would let it lie for a while and see what the Secretary and the Chairman do to take the opportunity with the legislation. I have a lot of confidence in them.

Admiral TRAIN. Looking toward a revision to the act, but to highlight one of the points Mr. Brown made, he commented that the CINC is concerned with from today out to about 3 years, and that the service chiefs window that they need to concern themselves with is the time period following that. The budgetary access we have given the CINCs today is good in that it helps them get out

from under problems like I had when I was CINC. For example, knowing that Iceland was the key strategic piece of real estate for the accomplishment of my mission should there be a requirement to conduct a North Atlantic campaign. I just couldn't make the system upgrade the air defenses in Iceland so I could insure I had that asset if I ever became involved in conflict.

Today, the CINC can do that. He still doesn't have very much of a staff structure to help him do that, but he shouldn't have—he shouldn't be staffed to do programmatic work. All he needs to do is identify what he needs and then convey that through the JROC, and the other mechanisms that have emerged in the wake of Goldwater-Nichols and make sure he gets his needs satisfied.

I don't think that requires a change in legislation but it is important to understand that there are people out there who believe that because of Goldwater-Nichols, the CINCs should each have their budget quality program shop.

I would respectfully suggest that such suggestions be resisted with some energy.

General HERRES. I am glad Admiral Train made that point because there has been that pressure and it has been this all along that CINCs ought to have their own budgets. I submit you have got to be careful, keep this balance, don't let the balance go too far in one direction.

The CINCs have a tendency to be parochial from time to time, too. If you give them their own budgets instead of having three military departments argue with one another from time to time, you may have eight or nine CINCs arguing with one another. That may be unparochialism. So you have got to be careful. One of the problems we had in institutionalizing this requirement's influence is getting the cultural change to take place in the CINCs staffs.

I forced the system a number of times by sending long messages, full of questions out to the CINC about having a new system, and how are you going to employ it? How are you going to manage the logistics support? Have you thought about how it is going to be targeted or what have you? There are a lot of systems, I don't want to get into specific examples. Well, staffs don't know how to answer the kind of questions we asked.

But we needed answers to those questions, and we needed them from the CINCs. Sometimes the CINC staff would just turn that question around and task one of his components to answer, which is very frustrating for me because then I was getting the Air Force answer or the Army answer and here is the staff telling the component what to tell me. But I was patient, I understood, and I just kept hammering away with questions that forced the CINCs to address the issues.

I forced DIA to come in and make statements that they had never been asked to make. It was hard for a while.

They would put some second-rate analyst sometimes, somebody who didn't have enough experience for the degree of difficulty of the problem. Then I would raise a little heck and pretty soon get the director involved and then things would get back on track. I say all of this only to point out, it does take time for this thing to build one layer at a time. Secretary Brown, I don't think, understands how much groundwork has been done.

Now, I would agree that if I were king, there would be a couple three directives that I would get implemented right away. But there has been a lot of change of people and, so forth, and so on, and the acquisition community has been a little unsettled over there. You have had several different under secretaries for acquisition, under that, and so it has been hard to work all of that out.

But I certainly emphasize that the CINCs can't do everything that everybody thinks they ought to do. There is a limit to their role as well as their is a limit to the service's role. You should not go so far as to emasculate the proper role of the military departments. That is to resource management. To make sure that you get the gasoline and the ammunition and the spare parts, and as General Smith said, to the right place at the right time. The Joint Staff and the CINCs can't do that. It is very helpful on those admittedly fairly large service staffs that Secretary Brown referred to, to do a lot of grunt detail work that people just don't understand. It has to be done. Don't emasculate the force structure role.

Somebody has got to worry about that air superiority Fighter F-20-5 or 20-10. The CINC staffs are going to be interested, but not with the same institutional interest that the Air Force or the Navy has in undersea warfare of 20-5 and 20-10, and so forth. So there is a very important role for them to play.

The CHAIRMAN. Let me ask the question of Dave Jones to talk a little bit about the proposal—what you were talking about about decentralizing some of the decisionmaking that is going on in industry and the economy of how you would apply that to the Pentagon. Talk about it a little more.

General JONES. I don't have any magic answer to it. It seems to me every time we have a problem, we draw the authority up higher in the acquisition process.

We hire more inspectors, what basically finds more problems but don't really solve those problems. We have got a lack of trust in the Congress, the Defense Department, and it varies from committee to committee and individual to individual.

There is a relationship with industry that is quite controversial. The feeling is there are a lot of crooks out there in industry. It is not perfect, but basically industry wants to do what is right for the country. We need to take a look at, for example, the role of Congress with four committees and many subcommittees within those committees.

I know you are trying to cut down on reports. It would seem to me in the budget process that you should give more leeway and more authority to the Pentagon and hopefully they would give authority down through the system.

I know companies that delegate authority to make \$50 million decisions and delegate it fairly far down. That authority does not exist in the Government. So we end up doing a lot of things in a counterproductive way.

A problem is how we divide the budget up into manpower, procurement and the rest. For example, at a depot, there is an item of capital expenditure to improve the efficiency with a trade off manpower, that is very difficult to do.

In industry, somebody who runs an outfit that big would have the authority to make such decisions and implement them. You can't do it within the defense system.

So there are a lot of fundamental issues to address—how the budget is designed, where the priorities are, how the budget is broken out. The opportunity to change it—you will still have the problems—some of the problems we have today, the high price of certain things. But I think overall the efficiency will be so much better than we have had in the past.

Mr. SKELTON. Let me ask this, General.

In this whole discussion of centralization, decentralization, where do your military agencies fit in this whole scheme of things? Are you including that in your answer?

General JONES. I believe we have gone too far in the direction of centralization of many of those areas. I can recall many years ago all the arguments that—the Government should have GSA to buy desks and all the things of that nature. It has become a monstrous bureaucracy. So I would like to see a delegation of some decisions—and certainly not move more in the direction of centralization. You hit a diminishing returns on procurement at certain levels.

So I think too much is moved toward the DLA, too much is moved in that direction. I wouldn't all of a sudden disband them, but I would not go further in that direction. I would start easing the other way.

Mr. MARTIN. Thank you, Mr. Chairman.

I want to commend you for initiating these hearings on Goldwater-Nichols and reflect a little bit on where we have come from, particularly after the war in the Persian Gulf. I want to thank the gentlemen for their testimony.

I would like to point out that there is considerable interest in what, if anything, we should do further as far as Goldwater-Nichols is concerned. There is considerable interest in other aspects of defense.

Today, the Secretary makes certain announcements regarding base closures. But I would like to say this: I would hope the committee and the Congress would listen very carefully to what you had to say, that we have come a long way, and I think that is a tribute to my dear friend—God rest his soul—Bill Nichols, Senator Goldwater and other people who worked so hard on this. But we ought not to take Goldwater-Nichols' successes and feel we can do somebody a lot better. I think a little bit of flexibility out there is a good thing.

I just want to thank you again, and I look forward to more give and take with you gentlemen in particular, and others as we try to do the right thing without overdoing it.

Thank you very much.

The CHAIRMAN. Thank you, David.

Let me ask General Jones and General Herres to comment a little on the issue of roles and missions.

Do you see any impending change?

General JONES. I would like to see an evolutionary change in the UCP. One of the problems we have today is that most of the maritime forces are under the command of Admirals all the way up,

and most land forces are in under the command of Army and Air Force generals.

We maybe have one carrier task force in the Mediterranean, under an Army general and the rest are under an Admiral. The same thing is sort of true in reverse with the Army units and the Air Force units. A handful of such units are in the Pacific command, but most of them tend to be assigned to land commanders, Army or Air Force. I think we can evolve in the UCP as we reduce forces, as we come down in Europe. It is not something that should be imposed right now.

I believe as we move toward the conceptual approach General Powell is taking, we can take a good look at the roles and missions. I don't mean way down stream, for I agree with Harry Train that we have an opportunity now. But I am a little concerned about opening up a controversy right now when we don't quite know where we are going in the world, to all of a sudden start changing the roles and missions at this point.

We have too much chaos going on in the budget process and all the rest to take this argument head on. I would like to have the need grow as opposed to being imposed. It would be a real wizard to figure out just what the new roles and missions would be.

General HERRES. I would emphasize that. I know I hear those rumblings about the roles and missions, and I know there are a lot of people who are trying to get into the close air support thing and help the Department of Defense solve a problem that I think has long been outdated. Don't try and solve problems that were problems 10 years ago. We have a great tendency to do that in this town.

This business of who provides close air support has so much been overcome by technology, and the events that it is almost ludicrous. I think we ought to stop using the term "mission" for the military departments and use the term "function." They have roles and functions. I think we ought to get the idea out of our heads that we are going to give a function, translated as mission by some people, because the mission belongs to the CINCs.

You ought to give the idea that we are going to give a function to a military department because they want to do it or don't give it to them because they don't want to do it. That is not the way to run a military organization.

You give the mission that function to them because that is the most efficient place for that function to reside. You decide which is the most efficient place and you tell that military department, that is their responsibility. If they don't adequately fund that function, there is a role easy way to solve that problem and that is to get a new secretary and a new chief. It has proved in this town that that can be done. It is just that simple.

You don't solve that problem of people not doing their jobs right by reorganizing or restructuring missions or something like that. Now, as far as close air support is concerned, I think the Department of Defense has an artificial definition for it.

I ask the question, what does an Apache helicopter do? I asked this question a year and a half ago, 2 years ago: What does it do when it is shooting at tanks? You draw a big blank. Aren't they doing close air support? Of course they are. The Army does close

air support. Maybe not the way it is defined in JCS Pub-1, which says, only fixed wing planes do close support. But if you don't qualify the et cetera, et cetera, what else do you call it? You can call it fire support.

But I see a spectrum of extended support for engaged troops starting with helicopter fire power, extended-range artillery, and other aircraft that if needed can be brought to bare on the problem. I go into this example simply because it is a current one and it is a hot issue, and I want to emphasize that you can't look at it through the 1948 glasses. You have got to look at it through today's glasses. I don't accept this argument that this should be in the Army or the Air Force because the Air Force won't do close air support. The Air Force will do it if they are told to do it. If the CINC doesn't think that his air component commander is allocating enough air for close air support, he tells him to do that. If he doesn't do it the way he wants to do it, he could courts-martial him. You gave him that authority in Goldwater-Nichols. I think the allocation, from all I can hear, and Admiral Train supported the allocation, was done extremely well.

Chuck Horner struck that balance. But I don't think somebody in Washington needs to get into this what the Air Force and the Army will want or not want to do.

If the Secretary of Defense doesn't think that the Air Force is putting the right emphasis on close air support. All he has to do is call the the Secretary in and tell him. That is his job.

The CHAIRMAN. Thank you for the advice. I think that we will resist the temptation to meddle. You all have made a persuasive case that we should not meddle with the Act.

You have made a very good case and I think we will take your advice. You ought to get something out of being right and the three of you were all right before, so we will take your advice now.

Thank you very much.

[Whereupon, at 11:30 a.m., the panel adjourned.]

IMPLICATIONS FOR THE STRATEGIC DEFENSE INITIATIVE OF PATRIOT MISSILE'S SUCCESS IN OPERATION DESERT STORM

HOUSE OF REPRESENTATIVES, COMMITTEE ON ARMED SERVICES, PROCUREMENT AND MILITARY NUCLEAR SYSTEMS SUBCOMMITTEE, RESEARCH AND DEVELOPMENT SUBCOMMITTEE, AND THE DEFENSE POLICY PANEL, *Washington, DC, Tuesday, April 16, 1991.*

The subcommittees and panel met, pursuant to notice at 9:40 a.m., in room 2118, Rayburn House Office Building, Hon. Les Aspin (chairman of the committee) presiding.

STATEMENT OF HON. LES ASPIN, A REPRESENTATIVE FROM WISCONSIN, CHAIRMAN, HOUSE ARMED SERVICES COMMITTEE

The CHAIRMAN. The meeting will come to order this morning.

This morning the Defense Policy Panel joins the Procurement and R&D Subcommittees to review one of the most prominent weapon systems in Operation Desert Storm, the Patriot missile.

The Army says the Patriot killed 45 of the 47 Scuds it was launched against. Politically, the Patriot's deployment to Israel is credited with helping keeping the coalition together.

We are interested today in delving deeper into the Patriot's performance as part of an attempt to learn the lessons of the Gulf War. We hope to understand what the system tells us about the way we should provide for our defenses in the post-Cold War world.

First, we will explore how well the Patriot worked. Did it perform as well as the statistics seem to say? What problems arose? Did the ABM Treaty hamper the system's effectiveness as some have claimed?

Second, we will ask about the implications of this performance for our policy choices. Should theater missile defenses be the top priority?

Finally, we will discuss the implication of the Patriot's success for SDI. The Patriot defended against technologically unsophisticated short-range, non-nuclear missiles, fired one at a time. SDI, on the other hand, is designated to defend against a highly sophisticated inter-continental range nuclear attack with potentially thousands of warheads. Can we reason that SDI will work based upon the Patriot's performance?

We welcome as witnesses this morning Professor Ted Postol from M.I.T.; the Honorable Richard Perle, from the American Enterprise Institute; and Professor Al Carnesale from Harvard University. All are good friends and welcome to all.

Before we begin the testimony, let me recognize Bill Dickinson.

STATEMENT OF HON. WILLIAM L. DICKINSON, A REPRESENTATIVE FROM ALABAMA, RANKING MINORITY MEMBER, HOUSE ARMED SERVICES COMMITTEE

Mr. DICKINSON. Thank you, Mr. Chairman.

I too would like to join in welcoming our distinguished panelists this morning.

It seems to me that there are two unmistakable lessons to be learned from the performance of the Patriots in the Gulf. The first lesson is that at a critical moment our defense against the missile attack worked. Some today will argue that in a technical sense it was not perfect, and very few things are perfect.

The unqualified success I see, however, is that in providing even a limited defense to Israel, the Patriot allowed Israel to stay out of a war and thus save the U.N. coalition from fragmenting and ensured a militarily united front.

I join with my Chairman in his opening statement I think in the way he has stated the thrust of what we are trying to do. But one thing for sure, if when we look at the SDI and the potential for deployment and weigh that against the success of the Patriot, one thing for sure, if we had not had the Patriot, we would not have had any defense against the incoming Scuds. If we do not have anything for SDI, we will not have any missile defense there either.

So we have got a choice, it seems to me, of something or nothing.

So we are delighted to have you here and will be glad to get your views.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Let me now call upon the members of the panel. Why do we not start with Richard Perle, then go to Dr. Postol and then to Al Carnesale, and we will listen to the opening statements and your prepared testimony before we go to questions, but then we would like to go to questions to all of you.

Let me first get unanimous consent to put into the record any material you gentlemen see fit as part of your presentation.

Richard, the floor is yours.

**STATEMENT OF HON. RICHARD PERLE, RESIDENT FELLOW,
AMERICAN ENTERPRISE INSTITUTE**

Mr. PERLE. Thank you very much, Mr. Chairman. I am delighted to appear before the committee this morning to discuss Patriot and SDI.

The juxtaposition of the now famous anti-tactical ballistic missile system called Patriot and the idea of a defense against strategic missiles takes us right to the heart of the issue which I would join with this question. Should the United States remain as vulnerable to ballistic missiles in the future as it is today as vulnerable as Israel was before Patriot missiles were rushed to the defense of Israeli civilians? My answer is an emphatic no. We have been exposed and vulnerable long enough. This Nation has the financial and technical resources to defend against ballistic missiles and it is time we got on with the urgent task of developing a system to do so.

In arguing for according high priority to SDI, I am mindful of the importance of maintaining a credible nuclear deterrent to deter nuclear attack. Unlike many of the opponents of SDI, I do not believe that there is any necessary contradiction between the strategy of deterrence and the development and eventual deployment of strategic defenses. Indeed, properly conceived, I believe that strategic defenses can make a decisive contribution to the continued effectiveness of our deterrent posture. Indeed, it is possible that only strategic defenses can enable us to maintain deterrence without a hopeless and never-ending competition in the further refinement of strategic defensive forces.

Consider for a moment the burden of maintaining an effective deterrent with offensive weapons alone. It would be a task so daunting that we would not even attempt it. We do not. We long ago realized that undefended defensive weapons could not constitute an effective deterrent. So we have, for many years and in a great many ways sought to defend our strategic retaliatory forces. We pour tons of concrete around our missile silos and fit them out with shock absorption devices so that they can survive a nearby nuclear detonation. We put missiles on submarines and hide them under the seas so they cannot be found and destroyed. We place aircraft on alert so they can fly away on warning and thus escape attack. We are spending considerable sums, too much in my view, to develop a mobile missile to enhance the survivability of our land-based missile force. All of these passive defenses are intended to reinforce the strategy of deterrence. Indeed, without them our triad of strategic retaliatory forces would be more of an invitation to attack than a deterrent against it.

The Soviets too believe that strategic defenses play a vital role in promoting their security. In addition to all the passive defenses to which we have resorted, the Soviets have added active defenses on a massive scale. Thus they have deployed thousands of missiles to defend their national territory against attacking aircraft. They have developed a defense against ballistic missiles of dubious effectiveness aimed at defending that portion of their territory that can be covered by the anti-ballistic missile deployment around Moscow, an area that extends significantly beyond Moscow itself. Despite the collapse of their economy, they continue to invest massively in their own strategic defense initiative.

Mr. Chairman, it is common sense for us to try to achieve a sensible, practical balance between offensive and defensive forces in the composition of our deterrent. I can see no reason other than the suffocating weight of conventional wisdom for rejecting out of hand the potential contribution to deterrence of active strategic defenses. If it makes sense to move an American missile or hide it or shelter it so that it can survive attack, it surely makes sense to shoot down an attacking missile that might otherwise destroy, say, a Minuteman missile in its silo or a Trident submarine in port.

The military forces of nations have always been composed of a mixture of offensive and defensive weapons, as they are today. There is no historical precedent for the reliance exclusively on offensive weapons, and for good reason. The balance of advantage between offense and defense is constantly changing, with technology sometimes favoring one, sometimes the other. I believe this is a

moment when the costs of assuring a survivable deterrent without resort to defenses against ballistic missiles are likely to be prohibitive, a moment when limited defenses can be cost effective and stabilizing.

It is again common sense that a defense need not be perfect to contribute even significantly to our security and to deterrence. The Patriot was certainly not a perfect defense of the territory of Israel or Saudi Arabia. There is, in fact, no perfect defense. There is no perfect offense. There is no perfect security. Security is a relative thing and the balance between offense and defense bears significantly on whether we are more or less secure. The notion that only a perfect defense is worth having is perfect nonsense. Yet it is this silly idea that, more than any other, animates the continuing opposition to SDI.

A defense that was only, say, 50 percent effective against Soviet ballistic missiles would assure the failure of any preemptive attack on our deterrent, however unlikely such a preemptive attack might be. Achieving the same result by investing billions more in our offensive forces would be far less likely to achieve a comparable result. If properly deployed, such a partial defense could cover a variety of critical installations in addition to our force of land-based missiles and bomber aircraft.

Mr. Chairman, it is dangerous to the point of irresponsibility to choose to remain utterly unprotected against an accident involving a ballistic missile landing on our territory or a deliberate launch by a third country. I wonder how many of the Members of Congress who have opposed the SDI program or voted to slash the appropriation to move it forward would turn out at a hearing called in the aftermath of an accident to explain why as a matter of high principle they had thought it dangerous to deploy a defense even against an accidental missile launch.

The obsession with a model of U.S.-Soviet interactions that is not borne out by careful analysis has, for the last two decades, come to dominate our thinking about strategic defenses. That is long enough for a wrong and shallow notion. Those who subscribe to it are terrified that the deployment of even limited U.S. defenses will touch off an uncontrolled arms race with the Soviet Union, the Soviet Union, which can barely feed its people. Thus they would forego insurance against an accident in the mistaken belief that even a modest strategic defense initiative is a greater threat to our security than an accidental or an unauthorized or a third-country launch. One of the ways in which the world has changed is to put these latter threats much higher on the American agenda. The former threat much lower.

This fear that the successful development of ballistic missile defenses would actually worsen our situation and make us less secure never made much sense even during the long night of the Cold War. Now it is preposterous. Given the experience we have just been through, watching night after night as the Scud missiles fell on Israel and Saudi Arabia, it is hard to believe that there could still be opposition to the development of a ballistic missile defense that might do for us what the Patriot did for our friends in the Middle East.

I do not believe, Mr. Chairman, that a perfect or even a near-perfect defense is attainable, but that should not stop us from doing what can be done to develop and deploy those limited defenses that can make deterrence more stable. The argument that SDI is not worth having if 10 percent of the missiles got through because 10 percent of the missiles could do devastating damage misses the point about deterrence entirely.

In my judgment, we can do everything of interest in the SDI program with adequate funding and the correct or broad interpretation of the ABM Treaty. The effort to restrain the President's use of the freedom available to this country under the terms of that treaty is a direct and immediate threat to the potential success of the SDI program. I believe that many of those who have thus far succeeded in imposing a restricted interpretation on the Department of Defense understand that perfectly well. They have thus managed to disguise and attack on strategic defenses as a defense of international law with consequences fatal to the SDI program.

Thus far, President Bush, like President Reagan before him, has chosen to acquiesce in the Congress's usurpation of the President's constitutional authority for implementing treaties. One can only hope that the demonstrated effectiveness of Patriot will cause the President to reconsider whether he is wise to allow the Congress to strangle SDI by imposing on him an unduly restrictive view of the strictures of the ABM Treaty.

I confess to having difficulty conceiving of the world in the second quarter of the next century without significant defenses against ballistic missiles. The technology is too promising as we have seen. The desire of men and nations to be defended too powerful to expect that we have halted the march of history with the technology and weapons of the mid 20th Century.

If I am right that strategic defense is what history has in store for us, then I believe we ought to do what we can to assure that we are not second to acquire it. Because whoever is first may make more of his privileged position than we would like.

Our experience with the Patriot in Desert Storm demonstrates two things. One is that we can intercept ballistic missiles with a high degree of effectiveness. Patriot was not perfect and it is true that the Scud was a primitive device. Indeed, it was the very primitiveness of the Scud that permitted it to do as much damage as it did even when intercepted.

The other thing we have learned is that whatever the theorists now say about the desirability of being vulnerable is out the window when the first missiles start falling. If we are wise we will learn from Israel's close shave and get out of the barber's chair while there is still time. Saddam Hussein will not be the last fanatic to get his hands on a ballistic missile. Next time it may carry a nuclear or a chemical warhead. As it whizzes overhead, it will be too late to decide that vulnerability is not such a good idea after all.

Thank you, Mr. Chairman.

PREPARED STATEMENT OF HON. RICHARD PERLE

Mr. Chairman, I am delighted to appear before the Committee this morning to discuss Patriot and SDI. The juxtaposition of the now famous anti-tactical ballistic missile system called *Patriot* and the idea of a defense against strategic missiles—takes us right to the heart of the issue which I would join with this question: Should the United States remain as vulnerable to ballistic missiles in the future as it is today—as vulnerable as Israel was before *Patriot* missiles were rushed to the defense of Israeli civilians? My answer is an emphatic No! We have been exposed and vulnerable long enough. This nation has the financial and technical resources to defend against ballistic missiles and it's time we got on with the urgent task of developing a system to do so.

In arguing for according high priority to SDI, I am mindful of the importance of maintaining a credible nuclear deterrent to deter a nuclear attack. Unlike many of the opponents of SDI, I do not believe that there is any necessary contradiction between a strategy of deterrence and the development and eventual deployment of strategic defenses. Indeed, properly conceived, I believe that strategic defenses can make a decisive contribution to the continued effectiveness of our deterrent posture. Indeed, it is possible that only strategic defenses can enable us to maintain deterrence without a hopeless and never-ending competition in the further refinement of strategic offensive forces.

Consider for a moment the burden of maintaining an effective deterrent with offensive weapons alone. It would be task so daunting that we would not even attempt it. And we don't.

We long ago realized that undefended offensive weapons could not constitute an effective deterrent. So we have, for many years and in a great many ways, sought to defend our strategic retaliatory forces. We pour tons of concrete around our missile silos and fit them out with shock absorption devices so that they can survive a nearby nuclear detonation. We put missiles on submarines and hide them under the seas so they cannot be found and destroyed. We place aircraft on alert so they can fly away on warning and thus escape attack. We are spending considerable sums—too much, in my view—to develop a mobile missile to enhance the survivability of our land-based missile force.

All of these passive defenses are intended to reinforce the strategy of deterrence. Indeed, without them our triad of strategic retaliatory forces would be more of an invitation to attack than a deterrent against it.

The Soviets too believe that strategic defenses play a vital role in promoting their security. In addition to all the passive defenses to which we have resorted, the Soviets have added active defenses on a massive scale. Thus they have deployed thousands of missiles to defend their national territory against attacking aircraft. And they have deployed a defense against ballistic missiles aimed at defending that portion of their territory that can be covered by the anti-ballistic missile deployment around Moscow—an area that extends significantly beyond Moscow itself. And despite the collapse of their economy, they continue to invest massively in their own strategic defense initiative.

Mr Chairman, it is common sense for us to try to achieve a sensible, practical balance between offensive and defensive forces in the composition of our deterrent. I can

see no reason other than the suffocating weight of conventional wisdom for rejecting out of hand the potential contribution to deterrence of active strategic defenses. If it makes sense to move an American missile or hide it or shelter it so that it can survive attack it surely makes sense to shoot down an attacking missile that might otherwise destroy a Minuteman missile in its silo or a Trident submarine in port.

The military forces of nations have always been composed of a mixture of offensive and defensive weapons --as they are today. There is no historical precedent for the reliance exclusively on offensive weapons--and for good reason. The balance of advantage between offense and defense is constantly changing, with technology sometimes favoring one, sometimes the other. I believe this is a moment when the costs of assuring a survivable deterrent without resort to defenses against ballistic missiles are likely to be prohibitive, a moment when limited defenses can be cost effective and stabilizing.

It is again common sense that a defense need not be perfect to contribute, even significantly, to our security and to deterrence. There is no perfect defense. There is no perfect offense. And there is no perfect security. Security is a relative thing; and the balance between offense and defense bears significantly on whether we are more or less secure. The notion that only a perfect defense is worth having is perfect nonsense. And yet it is this silly idea that, more than any other, animates the opposition to SDI.

A defense that was only, say, 50% effective against Soviet ballistic missiles, would assure the failure of any preemptive attack on our deterrent. Achieving the same result by investing billions more in our offensive forces would be far less likely to achieve a comparable result. And, if properly deployed, such a partial defense could cover a variety of critical installations in addition to our force of land-based missiles and bomber aircraft.

Mr. Chairman, it is dangerous to the point of irresponsibility to choose to remain utterly unprotected against an accident involving a ballistic missile landing on our territory or a deliberate launch by a third country. I wonder how many of the members of Congress who have opposed the SDI program or voted to slash the appropriation to move it forward would turn out at a hearing called in the aftermath of an accident to explain why, as a matter of high principle, they had thought it dangerous to deploy a defense even against an accidental missile launch.

The obsession with a model of US--Soviet interactions that is not borne out by careful analysis has, for the last two decades, come to dominate our thinking about strategic defenses. That's long enough for a wrong and shallow notion. Those who subscribe to it are terrified that the deployment of even limited U.S. defenses will touch off an uncontrolled arms race with the Soviet Union. Thus they would forgo insurance against an accident in the mistaken belief that even a modest SDI is a greater threat to our security than an accidental or an unauthorized or a third country launch.

This fear that the successful development of ballistic missile defenses would actually worsen our situation and make us less secure never made much sense, even during the long night of the cold war. Now it is preposterous. And given the experience we've just been through--watching night after night as the Scud missiles fell on Israel and Saudi Arabia--it is hard to believe that there could still be opposition to the development of a ballistic missile defense that might do for us what the *Patriot* did for our friends in the Middle East.

I do not believe, Mr. Chairman, that a perfect or even a near-perfect defense is attainable. But that should not stop us from doing what can be done to develop and deploy those limited defenses that can make deterrence more stable. The argument that SDI isn't worth having if 10% of the missiles get through because 10% of the missiles could do devastating damage misses the point about deterrence entirely.

In my judgment we can do everything of interest in the SDI program with adequate funding and the correct, or broad interpretation of the ABM Treaty. The effort to restrain the President's use of the freedom available to this country under the terms of that treaty is a direct and immediate threat to the potential success of the SDI program. And I believe that many of those who have thus far succeeded in imposing a restricted interpretation on the Department of Defense understand that.

They have thus managed to disguise an attack on strategic defenses as a defense of international law, with consequences fatal to the SDI program.

Thus far President Bush, like President Reagan before him, has chosen to acquiesce in the Congress's usurpation of the President's constitutional responsibility for implementing treaties. One can only hope that the demonstrated effectiveness of *Patriot* will cause the President to reconsider whether he is wise to allow the Congress to strangle SDI by imposing on him an unduly restrictive view of the strictures of the ABM Treaty.

I confess to having difficulty conceiving of the world in the second quarter of the next century without significant defenses against ballistic missiles. The technology is too promising, and the desire of men and nations to be defended too powerful, to expect that we have halted the march of history with the technology and weapons of the mid 20th Century.

If I am right that strategic defense is what history has in store for us, then I believe that we ought to do what we can to assure that we are not second to acquire it. Because whoever is first may make more of his privileged position than we would like.

Our experience with the *Patriot* in *Desert Storm* demonstrates two things: one is that *we can intercept ballistic missiles with a high degree of effectiveness*. The other is that whatever the theorists now say about the desirability of being vulnerable is out the window when the first missiles start falling. If we are wise we will learn from Israel's close shave and get out of the barber's chair while there is time. Saddam Hussein will not be the last fanatic to get his hands on a ballistic missile. Next time it may carry a nuclear or chemical warhead. And as it whizzes overhead, it will be too late to decide that vulnerability isn't such a good idea after all.

The CHAIRMAN. Richard, thank you very much.
Dr. Postol.

**STATEMENT OF PROFESSOR THEODORE A. POSTOL, CENTER FOR
INTERNATIONAL STUDY, MASSACHUSETTS INSTITUTE OF
TECHNOLOGY**

Dr. POSTOL. Thank you very much for the opportunity to testify here on the question of what we have learned from our experience in the Gulf that is relevant to SDI.

The answers to this question have both technical and political dimensions. However, in my remarks today, I will focus only on questions of what we have learned technically.

I believe that a careful technical review of our experience with Patriot in the Gulf is likely to reveal that we have not learned anything new that is relevant to the problems of strategic defense against nuclear weapons.

We have, however, been reminded of five lessons that we already know or should have known.

Lesson one is that making non-nuclear intercepts of fast-moving ballistic missiles is a difficult technical task. As a result, even an outstandingly capable air defense like Patriot could not and did not prevent considerable damage on the ground. This lesson is even more striking when one pauses to consider the remarkably primitive nature of the threat. Had this defense faced nuclear-armed missiles, it would have failed to avert a nuclear catastrophe.

Lesson two is that the unexpected can and will happen. That even a good defense must have time to adjust to unexpected events in order to function in an optimal fashion. The Gulf War experience with Patriot demonstrates that even modest countermeasures, combined with surprise, will seriously degrade quite capable defenses. Almost all SDI scenarios unrealistically require that the defense perform the first time with near perfection and under all imagined and unimagined conditions.

Lesson three is that it is very difficult to make low-altitude non-nuclear intercepts of ballistic missiles without also causing high levels of damage on the ground. Many of the SDI systems seek to avoid this difficulty by attempting to make intercepts at high altitudes. However, in the near vacuum of space these SDI systems can readily be defeated with very light decoys.

Lesson four is that even a very capable low-altitude defense may well not be able to lower the overall levels of damage from non-nuclear ballistic missile attacks. In fact, a low-altitude non-nuclear defense might even increase the overall level of ground damage relative to no defense at all. This lesson almost certainly applies as well to non-nuclear ballistic missiles armed with chemicals and to nuclear armed ballistic missiles.

A fifth lesson is that Patriot was greatly aided by information that was relayed by space-based sensors. This lesson cannot and will not be ignored by the Soviet Union. It therefore raises the question of what national strategy will best help us to protect our current and future investments in space assets.

In the body of my testimony to follow, I will expand on my introductory remarks in three parts.

First, I will discuss why the experiences in the Gulf War with Patriot demonstrate that we have made little progress in solving several key problems that are critical to the functioning of strategic defenses.

Second, I will discuss what I regard to be the most fundamental problems that must be solved if credible strategic defenses are to be possible.

Third, I will discuss whether the global protection against limited strikes or GPALS SDI concept offers any realistic new hopes that these fundamental SDI problems can be solved.

Before I turn to the question of what we have learned from the Gulf War experience with Patriot, I would like to make a very important point about the Patriot system. My comments about Patriot performance are only relevant to Patriot when it is functioning as an anti-missile defense. Patriot is a very capable air defense. It has been implemented with great ingenuity and competence. The fact that it suffers the same limitations of other realizable anti-missile defenses does not mean it also suffers serious limitations as an air defense.

With these remarks in mind, let me turn to the question we are here today to discuss. What has the experience in the Gulf War with Patriot taught us that is relevant to SDI?

There are two observations from our experience with Patriot in the Gulf War which indicate that fundamental technical barriers to non-nuclear strategic defenses remain.

First, the Patriot operators could not initially distinguish between the front and back pieces of Scud missiles that were breaking up on reentry. After some software modifications, it appears that they had some success in distinguishing the front pieces which contained warheads from the back pieces which did not.

This observation suggests that Patriot defenses could be readily defeated by even very poor decoys and other countermeasures as long as there was some element of surprise. It also suggests that competently implemented decoys would be even more effective.

Second, even when Patriot successfully intercepted incoming Scud missiles, the falling pieces of both Scuds and Patriots still inflicted tremendous levels of damage on the ground. In addition, Scud missile warheads were not always destroyed by intercepts and expended Patriots occasionally fell or dove into the ground causing considerable damage from missile impacts and warhead detonations. This observation suggests that even in the absence of enemy countermeasures, Patriot could not successfully defend against even small nuclear attacks.

The difficulties of making non-nuclear intercepts with Patriot are illustrated by a sequence of five photos that I have reproduced and included with copies of my testimony. Those of you who are interested in inspecting these photos should find them in this 4-by-9 inch envelope. If you look into the manila envelopes with an MIT address in the corner you will find these—pull the photos out please if you are interested.

The photos show a sequence of events in which a Patriot interceptor successfully engages a Lance ballistic missile. The sequence of photos clearly show the front end of the Lance emerges from the engagement intact and it continues to fall to the ground.

As these photos make clear, there is at least some reason to doubt the value of such successful intercepts or ballistic missiles. If the Lance had been armed with a well-designed nuclear or chemical warhead, it is reasonable to expect that the warhead might still have been delivered. As a result of intercept phenomena like that demonstrated in these photos, and other phenomena that are described in my written testimony, I believe a case can be made that we may never know whether Patriot in fact reduced the overall level of damage.

Since this is an important point that could bear on many key policy decisions, I would like to explain the reasoning behind this speculation.

First, let me briefly summarize some of the publicly available information about our experience with Patriot in the Gulf War. The most interesting and striking of the data comes from our experience with Israel. About 40 Scuds were fired at Israel. Most of them were aimed at Tel Aviv. Before the Patriot units began defensive operations, 13 unopposed Scuds fell in the Tel Aviv area. After Patriot defensive operations began, 11 Scud attacks were engaged. During the period of Patriot defense, there were 15 percent fewer Scud attacks relative to the period when there was no defense. Yet the number of apartments reported damaged almost tripled and the number of injuries from attacks increased by almost 50 percent.

This data suggests that the defensive operations could well have increased the net level of ground damage relative to the case of no defense. That is, when the Patriot defense was used, it appears that the damage per Scud attack was actually higher than when there had been no defense.

In my written testimony, I provide a more detailed accounting of the damage and I explain why damage levels could have actually increased.

Let me now turn to the questions that the Patriot experience would have needed to address to teach us new things about SDI.

There are three basic problems that severely limit the capabilities of all realizable ballistic missile defenses. I am talking about realizable defenses here. One, discriminating decoys from missiles or warheads at high altitudes in space. I know of no realistic methods to do this, to discriminate in space. Two, discriminating decoys from missiles or warheads at lower altitudes in the atmosphere. Three, making sensor systems that cannot be degraded or destroyed by nuclear effects, electronic countermeasures or by other means.

There is a fourth problem which is only relevant to SDI systems. Making non-nuclear intercepts in a countermeasure environment is an unsolved problem and perhaps unsolvable. This last problem is special to the SDI program because ballistic missile defenses that were contemplated prior to 1983 all depended on the use of nuclear weapons to intercept nuclear weapons.

Patriot did not face any of these SDI problems. It was designed to work in the atmosphere rather than the near vacuum of space. It did not face a threat that included well-designed decoys. There were no electronic countermeasures or nuclear effects to disrupt its

operations. It was not attempting to intercept nuclear armed ballistic missiles.

Even so, the problems that Patriot had intercepting primitive threats like a Scud underscores how difficult a set of tasks confront SDI.

Let me now turn to the question of GPALS, the Global Protection Against Limited Strikes system that is the newest of the many SDI baseline systems that we have seen over the past few years.

A preliminary examination of the GPALS concept suggests five serious problems with the space-based components of GPALS. First, it is easy to underfly the GPALS space-based component with even quite primitive short-range ballistic missiles. A discussion of this point is provided in my written testimony along with tables and graphs for missiles of different range.

Second, both the space-based and ground-based components of GPALS are likely to be highly susceptible to simple decoy countermeasures. This is also true of an upgraded Patriot system but a well-designed and implemented upgrade would at least have the merit of being perhaps 100 times less expensive than GPALS.

Third, the space-based components of GPALS would confront the Soviets with an extraordinarily potent anti-satellite threat. This threat would be so great and so unambiguous that it is difficult to see how the Soviets could ignore it.

Fourth, the ground-based components of GPALS would also be capable of anti-satellite operations, although it would likely be limited to low altitudes. By transferring this technology to allies like Israel, the U.S. will increase the number of countries that could take independent actions against low-altitude satellites.

A fifth point, which is perhaps obvious, is that GPALS would be totally unable to defend against cruise missile attacks.

Before completing my testimony, I would like to briefly highlight the anti-satellite potential of GPALS, which has so far gotten little attention in policy deliberations.

Although the space-based component of GPALS will have little capability against short-range ballistic missiles, it will have tremendous capability against satellites.

As I have shown in the appendix to my testimony, such a system could, for instance, destroy nearly all Soviet high- and low-altitude satellites within a period of about 2 hours.

Some of the interceptor and sensing components of the ground-based systems could be under the control of allies who we have transferred the technology to. The collateral security problems that could be created by these circumstances requires careful consideration beyond that which has so far occurred.

In summary, the Gulf War experience with Patriot has revealed no new realistic defense choices for the U.S. and its allies. We have still not solved any of the fundamental problems that have always confronted strategic missile defenses and the SDIO GPALS system offers no prospect for altering this situation in the foreseeable future.

However, Patriot is without doubt the world's best air defense, and can and should be a strong component of our national defense strategy.

Thank you very much.

PREPARED STATEMENT OF THEODORE A. POSTOL

Testimony Before the House Armed Services Committee

by

Theodore A. Postol
Professor of Science, Technology, and National Security Policy

Program in Science, Technology and Society
and
Center for International Studies

Massachusetts Institute of Technology

April 16, 1991

Thank you very much for the opportunity to testify here on the question of what we have learned from our experience in the Gulf that is relevant to SDI.

The many answers to this question have both technical and political dimensions, however in my remarks today I will focus only on questions of what we have learned technically.

I believe that a careful technical review of our experience with PATRIOT in the Gulf is likely to reveal that we have not learned anything new that is relevant to the problems of strategic defense against nuclear weapons.

We have, however, been reminded of five lessons that we already know -- or should have known.

Lesson one is that making non-nuclear intercepts of fast moving ballistic missiles is a difficult technical task. As a result, even an outstandingly capable air defense like PATRIOT could not and did not prevent considerable damage on the ground from a remarkably primitive threat that did not even incorporate countermeasures. If this defense had faced nuclear-armed missiles it would have failed to avert a nuclear catastrophe.

Lesson two is that the unexpected can and will happen, and that even a good defense must have time to adjust to unexpected events in order to function in an optimal fashion. The Gulf War experience with PATRIOT demonstrates that even modest countermeasures combined with surprise will seriously degrade quite capable defenses. Almost all SDI scenarios unrealistically require that the defense perform the first time with near perfection and under all imagined and unimagined conditions.

Lesson three is that it is very difficult to make low-altitude non-nuclear intercepts of ballistic missiles without also causing high levels of damage on the ground. Many of the SDI systems seek to avoid this difficulty by attempting to make intercepts at high altitudes. However, in the near vacuum of space these SDI systems can readily be defeated with very light decoys.

Lesson four is that even a very capable low-altitude defense may well not be able to lower the overall levels of damage from non-nuclear ballistic missile attacks. In fact, a low-altitude non-nuclear defense might even increase the overall level of ground damage relative to no defense at all. This lesson almost certainly applies as well to non-nuclear ballistic missiles armed with chemicals¹. Such practical limitations on defense-performance are yet more problematic when the defense must engage nuclear-armed ballistic missiles.

A fifth lesson is that the PATRIOT was greatly aided by information that was relayed by space-based sensors. This lesson can not and will not be ignored by the Soviet Union. It therefore raises the question of what national strategy will best help us to protect our current and future investments in space assets.

In the body of my testimony to follow I will expand on my introductory remarks in three parts.

First, I will discuss why the experiences in the Gulf War with PATRIOT demonstrates that we have made little progress in solving several key problems that are critical to the functioning of strategic defenses.

Second, I will discuss what I regard to be the most fundamental problems that must be solved if credible strategic defenses are to be possible.

And third, I will discuss whether the Global Protection Against Limited Strikes or GPALS SDI system concept offers any realistic new hopes that these fundamental SDI problems can be solved.

Before I turn to the question of what we have learned from the Gulf War experience with PATRIOT, I would like to make a very important point about the PATRIOT system. My comments about PATRIOT performance are only relevant to PATRIOT when it is functioning as an anti-missile defense. PATRIOT is a very capable air defense that has been implemented with great ingenuity and competence. The fact that it suffers the same limitations of other realizable anti-missile defenses does not mean it also suffers serious limitations as an air defense.

With these remarks in mind, let me turn to the question we are here today to discuss -- what has the experience in the Gulf War with PATRIOT taught us that is relevant to SDI. There are two observations from our experience with PATRIOT in the Gulf War

-
1. For an expanded discussion of problems associated with defending against chemically-armed ballistic missiles see *The Prospects for Successful Air-Defense Against Chemically-Armed Tactical Ballistic Missile Attacks on Urban Areas*, Theodore A. Postol, March 1991, A Defense and Arms Control Studies Working Paper, Defense and Arms Control Studies Program, M.I.T. Center for International Studies, Cambridge, Massachusetts. A copy of this short paper is attached as an appendix to this testimony.

which indicate that fundamental technical barriers to non-nuclear strategic defenses endure.

First, the PATRIOT operators could not initially distinguish between the front and back pieces of SCUD missiles that were breaking up on reentry. After some software modifications, it appears that they had some success in distinguishing the front pieces, which contained warheads, from the back pieces which did not.

This observation suggests that PATRIOT missile defenses could be readily defeated by even very poor decoys and other countermeasures, as long as there was an element of surprise. It also suggests that competently implemented decoys would be even more effective.

Second, even when PATRIOT successfully intercepted incoming SCUD missiles, the falling pieces of both SCUDs and PATRIOTs still inflicted tremendous levels of damage on the ground. In addition, SCUD missile warheads were not always destroyed by intercepts, and expended PATRIOTs occasionally fell or dove into the ground, causing considerable damage from missile impacts and warhead detonations. This observation suggests that even in the absence of enemy countermeasures PATRIOT could not successfully defend against even small nuclear attacks. Such a nuclear attack is what the SDI/GPALS system would presumably instead have to engage.

The difficulties of making non-nuclear intercepts with PATRIOT missiles is illustrated by a sequence of five photos that I have reproduced and attached to copies of my testimony. The photos were taken from a publicly available Raytheon promotional videotape² which shows a PATRIOT intercept of a LANCE short-range ballistic missile. This particular intercept is with an interceptor that had not been upgraded with the bigger warhead and fuzing modifications that occurred with the PACII upgrade, but it well illustrates the difficulties of making a non-nuclear intercept against the much faster SCUD missile.

The first photo shows a bright spot near its center very soon after the warhead of the PATRIOT interceptor detonates. The PATRIOT has arrived from the lower right corner of the photo while the LANCE has arrived from the upper left. On the lower right there is no contrail from the PATRIOT rocket motor because the motor has burned out prior to the interceptor's arrival. The second photo shows the later development of a spectacular debris cloud from the PATRIOT warhead detonation. In the upper left of the blast cloud one can see pieces of PATRIOT debris that have been carried forward by momentum through the cloud. At the lower right of the debris cloud the front end of the LANCE is beginning to emerge. The third photo shows the undamaged front end of the LANCE emerging from the cloud as it continues to fall forward mostly intact. The next photo shows the progress of the missile front end as it continues to fall forward. The final photo shows a concluding statement in the promotional film, "*10 Out of 10 ATM Intercepts Including 5 Direct Hits*". As the previous photos make clear, there is at least some reason to doubt the value of such "successful" intercepts of ballistic missiles. If the LANCE missile shown in the previous photos were armed with a well designed nuclear or chemical warhead, it is reasonable to expect that its warhead might be successfully delivered.

2. Patriot ATM Capability Deployed for Multi-Threat Effectiveness (rev 4 of V-910)

As a result of intercept phenomena like that demonstrated in these photos, and other phenomena that I will next discuss, I believe a case can be made that we may never know whether PATRIOT in fact reduced the overall level of damage from Gulf War SCUD attacks. That is, it is possible that if we had not attempted to defend against SCUDs the level of resulting damage would be no worse than what actually occurred.

Since this is an important point that could bear on many key policy decisions, I would like to explain the reasoning behind this speculation.

First let me briefly summarize some of the publicly available information about our experience with PATRIOT in the Gulf War.

It appears¹ that there were about 47 claimed engagements of SCUDs in which 45 hits were claimed³. Somewhere around 140 PATRIOTs may have been fired at the first 40 SCUDs and perhaps 18 more were fired at the last 7. In all, about 158 interceptors appear to have been used to engage roughly 47 SCUDs.

In Dhahran, a SCUD that landed within the defended perimeter of a PATRIOT battery hit one of our barracks killing instantly 28 U.S. troops. For reasons that have yet to be made public, this SCUD was not engaged by the local PATRIOT battery. In Riyadh one of the many PATRIOT intercepts that appear to have been described as successful may have diverted a SCUD, or broke it into large pieces, causing very heavy damage to a large office building in which one person was killed and scores were injured.

The data from Israel is, however, far more striking and perhaps raises some new and disturbing questions about limited ballistic missile strategic defenses. About 40 SCUDs were fired at Israel, most of them aimed at the Tel Aviv area. The heaviest damage from the SCUD attacks appears to have occurred in the municipality of Ramat Gan, which is a town on the east border of Tel Aviv. Before PATRIOT units began defensive operations 13 unopposed SCUDs fell in the Tel Aviv area. These SCUDs damaged 2698 apartments and wounded 115 people. After PATRIOT defensive operations began, 11 SCUD attacks were engaged⁴. Leslie Cockburn, a television journalist stationed in Tel Aviv reported that on the night of January 25th she observed the launch of four PATRIOTs, three of which later impacted on the ground in the Tel Aviv area. During the defensive engagements against these 11 SCUDs, 7778 apartments were damaged and 168 people were wounded -- one person was killed by the direct effects of a SCUD attack and three died of heart attacks. During the period of PATRIOT defense there were 15% fewer SCUD attacks relative to the period when there was no defense, yet the number of apartments reported damaged almost tripled, and the number of injuries from attacks increased by almost 50%⁵. This data suggests that the defensive operations could well have increased the net level of ground-damage relative to the case of no defense.

3. See Robert Davis, *The Wall Street Journal*, Back page of front section, Monday, April 15, 1991.

I would also like to thank Professor Joseph Shea of the M.I.T. Department of Aeronautics and Astronautics for also providing some information on these events.

4. I would like to thank Dr. Avner Cohen, Visiting Senior Fellow at the M.I.T. Center for International Studies for calling my attention to information on damage in

By the time it was all over, more than 30 apartment buildings and 100 private homes were damaged beyond repair, and perhaps another hundred apartment buildings were damaged severely enough to require major renovation. Some 2700 people had to be moved to alternative housing.

This qualitative account of damage on the ground when a PATRIOT defense has been represented as achieving 45 successful intercepts out of 47 attempts raises serious questions about the measure of effectiveness that has been used to portray the success of PATRIOT. The issue, of course, is not whether we hit SCUDs with PATRIOTs, but whether we stopped them from causing damage to the area we were supposed to defend. For this reason, the most appropriate measure of defense effectiveness is not intercepts. It is instead the amount of damage that occurred when PATRIOT was used relative to the damage that would have occurred had there been no attempt at defense. The public data suggests that the undefended situation could have resulted in ground damage that might well have not been substantially worse than that from the defended situation. Let me explain how such a seemingly surprising result could come about.

The SCUD missiles used against Saudi Arabia and Israel were very inaccurate weapons that would, if they were not intercepted by PATRIOTs, have impacted in moderately dense urban areas. An extended range SCUD that has burned all of its fuel during boost weighs between 5,000 and 6,000 pounds. Since the SCUD is moving at very high speed, at impact it has roughly half the destructive energy of its equivalent weight in TNT. Hence, although the approximately 500 pound SCUD warhead could be expected to do heavy local ground damage, similar or greater levels of ground damage could also be expected from high speed impacts of large pieces of SCUDs. However, heavy damage, serious injuries, or deaths from such impacts will only occur within perhaps several tens of meters from an impact.

As a result, if there had been no attempt to intercept SCUDs, some of them would have landed in open areas causing relatively little damage, some would have occasionally hit structures causing heavy damage, and some would at random land close enough to people to cause injury or death. Even if there had been no successful intercepts of SCUDs, the expected damage and loss of life from all the SCUD launches against Israel over the entire 40 days of war could be small relative to the losses that might instead have occurred from a single successful air attack involving perhaps 5 or 10 MIG-23 class aircraft⁶.

Israel and in helping me to interpret the damage reports. A very useful chronological summary of the damage caused in Israel by SCUD attacks can be found in the March 29, 1991 issue of Ma'ariv, which is an evening daily newspaper published in Tel Aviv.

5. The fact that the numbers of injured increased is especially striking since many people had fled from Tel Aviv by the time PATRIOT defensive operations began.
6. The MIG-27, which is the bomber variant of the MIG-23, can deliver about 6,000 pounds of munitions to a combat range of about 600 kilometers. Five to ten such aircraft carrying 12-500 pound bombs each could deliver between 60 and 120 bombs. If half of the dropped bombs were to contain cluster type munitions and the other half were to contain unitary warheads, it is quite plausible that such an attack could cause damage on a scale comparable to that from the 24 SCUD attacks on the Tel Aviv area.

T. A. Postol

-6-

April 16, 1991

Let me now compare the postulated situation of no defense to the defended situation we had in the Gulf. Each time PATRIOTs were used in attempts to intercept SCUD missiles, there were at least 3 types of events that caused some level of damage on the ground.

The first type of event was the complete destruction of SCUD missiles that might otherwise have landed harmlessly or caused damage. Although these intercepts were the most decisive of the possible outcomes of defense engagements, they nevertheless resulted in some ground damage from numerous pieces of falling debris.

The second type of event were intercepts that cut SCUDs into relatively large pieces that then fell in multiple locations. It appears that in some cases the SCUD warheads also fell intact and detonated, but the impact of large pieces could also do damage equal to or greater than that from the warhead. As a result, the pattern of damage was altered by these intercepts, but it is not clear that the total amount of ground damage was decreased. In fact, it is possible that in these cases the total amount of ground damage was increased.

The third type of event was intercepts that resulted in either PATRIOTs falling to the ground or PATRIOTs chasing SCUD missiles or pieces of debris to the ground. The PATRIOT warhead probably weighs about half of that of the SCUD's, but it is almost certainly made from a more highly energetic explosive. In addition, the PATRIOT warhead contains metal fragments that are designed to inflict heavy damage at maximal range. When a PATRIOT hits the ground on a diving trajectory it could well be travelling at a higher speed than a SCUD, and although its mass is smaller than that of an expended SCUD, it is still about a thousand pounds of mass hitting the ground at quite high speeds. One would therefore guess that such events would almost surely result in ground damage per PATRIOT impact comparable to that from an unintercepted SCUD.

Thus, although the level of damage with PATRIOT defending was small but significant, it might have also been small but significant if there was no attempt at defense. Discerning between these two rather similar situations will likely be difficult. Stating this somewhat differently, defending Saudi Arabia and Israel with PATRIOT may have changed the pattern of damage, and possibly the nature of some of the damage, but it may well not have changed the overall level of damage.

For this reason, I think it is very important that the Congress examine all the data associated with the performance of the SCUDs and PATRIOTs in the Gulf War, and that this data be carefully assessed to determine the damage mitigating role, if any, that was played by the PATRIOT defense.

Let me now turn to the fundamental questions about SDI systems that the PATRIOT experience would have needed to address to teach us new things about SDI.

There are three basic problems that severely limit the capabilities of all realizable ballistic missile defenses, they are:

1. Discriminating decoys from missiles or warheads at high altitudes in space.

I know of no realistic methods to discriminate decoys from warheads in the near vacuum environment of space.

2. Discriminating decoys from missiles or warheads at lower altitudes in the atmosphere, this is sometimes called endoatmospheric discrimination.

Since low-altitude decoys are more difficult and costly to build than high-altitude decoys, defeating defenses that make intercepts at lower altitudes is a somewhat more demanding but by no means impossible task for an attacker.

3. Making sensor systems that cannot be degraded or destroyed by nuclear effects, electronic countermeasures, or by other means.

I have separated out the issue of sensors functioning in a nuclear environment because it is all too often neglected. We should remember that when a defense has no eyes it cannot operate. The importance of this last elementary observation was amply demonstrated in both the Gulf air war and in the 100 hour ground campaign.

There is a fourth problem that is fundamental only to the specialized kinds of defenses that have been the focus of SDIO programs, that is:

4. Making non-nuclear intercepts in a countermeasure environment.

This problem is special to the SDI program because ballistic missile defenses that were contemplated prior to 1983 all depended on the use of nuclear weapons to intercept nuclear weapons. The problems that the PATRIOT had intercepting SCUDs underscores how difficult it is to stop a falling missile from hitting the ground with a non-nuclear intercept.

However, the problems that PATRIOT non-nuclear interceptors faced are not nearly as severe as those that would confront SDI interceptors. Since SDI interceptors are hit-to-kill vehicles, or have non-nuclear explosive warheads, they would be especially easy to defeat with countermeasures. This could simply be accomplished by surrounding target missiles or warheads with clouds of nearby decoys. Homing SDI interceptors would then be unlikely to choose the right target. In order to successfully implement this countermeasure, such decoys would only need to be separated from target missiles or warheads by meters or tens of meters.

Nuclear-armed interceptors cannot be defeated by such simple clouds of decoys since they can destroy all closely spaced decoys and warheads by simply flying into the cloud and detonating. Nuclear interceptor based defenses can, of course, still be defeated by decoys. However, because the lethality of nuclear interceptors is so large, special care is required to harden the decoys and to space them so they are thousands or tens of thousands of meters apart. As a result, decoys may need to be heavier to survive nuclear effects, dispensing mechanisms may be needed to deploy them, and additional propellant must be carried by attacking missiles. None of these penalties are imposed on the attacker by defenses that depend on non-nuclear interceptors. For these reasons,

SDI defense systems are far more susceptible to decoy countermeasures than are defenses that use nuclear interceptors.

PATRIOT did not face any of these problems. It was designed to work in the atmosphere rather than the near vacuum of space; it did not face a threat that included well-designed decoys; there were no electronic countermeasures or nuclear effects to disrupt its operations; and it was not attempting to intercept nuclear-armed ballistic missiles.

Let me now turn to the question of GPALS, the Global Protection Against Limited Strikes system that is the newest of the many baseline SDI systems we have seen over the past few years. The SDIO appears to believe that some form of this system could be built for perhaps forty billion dollars, but even if one accepts these claims the value of this system relative to other ways we might spend defense dollars clearly requires debate.

The issue I will address is whether the GPALS concept offers any new realistic hopes for building a limited defense against ballistic missile strikes.

At this time the GPALS system is no more than a set of vague and constantly changing viewgraphs that suggest it would have a space-based component of perhaps 1000 or more orbiting interceptors. The space-based component would be supported by a system of as yet unproven satellite-borne sensors named "Brilliant Eyes". GPALS would also have ground-based components consisting of a variety of optically homing hit-to-kill interceptors cued to targets by an x-band radar. Some of these interceptors, like the Israeli ARROW missile, would be built and controlled by an ally. It is particularly interesting that these interceptors would depend on a radar for cueing, as radar electronic countermeasures is perhaps one of the most highly evolved and powerful areas of modern military technology. There is one other point that is worth noting, GPALS is a system that will have to deal with advanced threats. The SCUD missile is the SS-1, and the missile technology that GPALS could face may well be beyond that of the SS-25.

A preliminary examination of the GPALS concept suggests five serious problems with the space-based components of GPALS.

First, it is easy to underfly the GPALS space-based component with even quite primitive short-range ballistic missiles.

Second, both the space-based and ground-based components of GPALS are likely to be highly susceptible to simple decoy countermeasures. This is also true of an upgraded PATRIOT system, but a well designed and implemented upgrade would at least have the merit of being perhaps a hundred times less expensive than GPALS⁷.

7. It should be kept in mind that PATRIOT is a system that has already been fielded and it is based on proven technology. Unlike the interceptors associated with the space-based component of GPALS, PATRIOTs do not need to be designed so they can function unattended for years while they lay in space. PATRIOT interceptors also do not need to be launched into orbit, a costly operation in itself.

Third, the space-based component of GPALS would confront the Soviets with an extraordinarily potent antisatellite threat. This threat would be so great and so unambiguous that it is difficult to see how the Soviets could ignore it.

Fourth, the ground-based components of GPALS would also be capable of anti-satellite operations, although it would likely be limited to low-altitudes. By transferring this technology to allies like Israel, the U.S. will increase the number of countries that could take independent actions against low-altitude satellites.

A fifth point, which is perhaps obvious, is that GPALS would be totally unable to defend against cruise missile attacks. We are moving into a period of world economic development where we can expect wide commercial availability of small efficient jet engines, guidance systems and other technologies for use in the next generations of small private aircraft. It may not be long before many small countries will be able to divert these technologies to build cruise missiles for terrorist purposes.

Let me now expand slightly on these remarks about GPALS by discussing first the problem of underflying the GPALS space-based component with short-range ballistic missiles. After that I will expand on the issue of GPALS susceptibility to decoys and its antisatellite potential

The space-based component of GPALS is not expected to be able to function below an altitude of between 100 and 130 kilometers, due to aerodynamic heating that blinds the sensor in the homing kill vehicle. Although heating is significant at these altitudes, atmospheric drag is not, so the motion of a ballistic missile flying at these altitudes is essentially unaffected by the very small amounts of atmosphere. Hence, all that an attacker needs to do to negate the space-based component of GPALS is to fly ballistic missile trajectories that have apogees below between 100 and 130 kilometers⁸.

For ballistic missiles that have been designed to reach ranges of between 1000 and 2000 kilometers there are only modest range or payload penalties associated with trajectories that keep them below the GPALS minimum engagement altitude. For those who are interested, I have provided a set of graphs and figures in the appendix attached to this testimony which shows trajectories that underfly GPALS. I have also included a table and a graph which summarizes the range losses for this class of ballistic missile trajectories.

Let me now briefly expand on the question of GPALS susceptibility to decoys. SDIO plans for GPALS to utilize several unproven sets of sensors which will be used to track objects and to discriminate. These sensors, assuming they can ever be moved from

-
8. At this time no one can know the actual minimum intercept altitude for GPALS, since the technology that would be used for such intercepts is yet to be proven. However for engagements against ballistic missiles that are intended to fly to ranges of about 1000 kilometers or less, the exact value of the minimum intercept altitude is not especially important. If, for example, the minimum intercept altitude were to turn out to be 130 km instead of 100 km, the aerodynamic heating on more lofted trajectories would only be slightly reduced. There would also be little decrease in the already small range and payload penalties associated with flying such low apogee trajectories.

viewgraphs to hardware, could still be readily defeated by decoys. One way to achieve such decoys would simply be to build modestly improved SCUD-like missiles, and intentionally cut them into pieces after they complete boost. Balloons, streamers, and electronic devices could be attached to different pieces to mask any discriminating details from distant sensors. An adversary could then readily present both the space-based and ground-based elements of GPALS with an overwhelmingly large set of targets.

Finally, although GPALS space-based interceptors will have little capability against short-range ballistic missiles, they will have tremendous capability against satellites. As I have shown in the appendix to my testimony, the space-based orbiting component of a GPALS defense system would pose a very rapid and large scale antisatellite threat to essentially all satellites in known orbits. Such a system could, for instance, destroy nearly all Soviet high and low altitude satellites within a period of about two hours. A less capable but similar Soviet GPALS system could pose an equally serious threat to all high and low altitude U.S. satellites.

In addition, the ground-based interceptors associated with GPALS would pose a considerable although not as potent anti-satellite threat to low-altitude satellites. Some of the interceptor and sensing components of the ground-based systems could be under control of allies who we have transferred the technology to. The collateral security problems that could be created by a GPALS system's anti-satellite potential therefore requires careful consideration beyond that which has so far occurred.

In summary, the Gulf War experience with PATRIOT has revealed no new realistic strategic defense choices for the U.S. and its allies. We have still not solved any of the fundamental problems that have always confronted strategic missile defenses, and the SDIO GPALS system offers no prospect for altering this situation in the foreseeable future.

Lessons for SDI from the Gulf War PATRIOT Experience: A Technical Perspective

APPENDIX TO TESTIMONY

**Testimony Before the House Armed Services Committee
April 16, 1991**

**Theodore A. Postol
Professor of Science, Technology, and National Security Policy
Massachusetts Institute of Technology**

Testimony Before the House Armed Services Committee

by

Theodore A. Postol

Professor of Science, Technology, and National Security Policy

Program in Science, Technology and Society
and

Center for International Studies

Massachusetts Institute of Technology

April 16, 1991

The material in this appendix is being presented to provide additional background information to those who have special interests in the technical aspects of anti-tactical missile defenses.

Assuming SCUD warheads fired at Tel Aviv weigh about 500 pounds, they would have a blast versus range behavior roughly comparable to that of a 500 pound general purpose bomb. Figure 1 shows blast overpressure versus range curves for U.S. general purpose bombs of different weight. As can be seen from the curve for 500 pound bombs, a blast of 5 pounds per square inch can occur at about 100 feet (about 30 meters) from the detonation point. This blast overpressure is enough to do severe damage to lightly built wood frame structures. Heavier reinforced structures, like those built of stucco or concrete, may suffer heavy damage at blast overpressures of 15 to 25 pounds per square inch. Such overpressures occur at a range 25 to 35 feet (approximately 10 meters) from the detonation of a 500 pound bomb. On the other hand, windows would be broken at blast pressures of a pound per square inch, which can occur at a range of 250 to 300 feet (almost 100 meters) from a detonation. Thus, one expects that the blast damage from a SCUD warhead detonation would inflict severe damage at ranges of order tens of meters.

It is also worthy of note that a primary bomb damage mechanism is high speed fragments from the bomb casing and material near the blast point. For this reason, a 1000 pound piece of SCUD impacting the ground at Mach 6 or higher can be expected to do considerable damage. Such a nonexplosive missile section will impact with half the destructive energy of its equivalent weight of TNT. Many very high speed fragments will be generated by such an impact causing damage quite comparable to that from a 500 pound bomb.

Figures 2 and 3 show the front page and a table containing chronological

-APPENDIX TO TESTIMONY-

data about the destruction from SCUD attacks in the Tel Aviv metropolitan area. The front page and table are from Ma'ariv, an evening daily newspaper published in Tel Aviv.

Figure 4 shows a publicly available diagram of the PATRIOT missile reproduced from the October 1984 edition of Military Technology¹. As shown in figure 5, an approximate model of the PATRIOT missile can be constructed from public data and the known properties of propellants. Several flyout trajectories for such a missile are shown in Figure 6 and an engagement timeline against a SCUD trajectory is shown in figure 7. The flyout trajectories show that the interceptor must be launched 15 seconds prior to making an intercept at an altitude of 5 kilometers. When PATRIOT launch occurs the SCUD is at an altitude of about 27 kilometers, where the density of air is still only a few percent of that at sea-level. As a result, at the time of PATRIOT launch, the SCUD is hardly affected by aerodynamic drag at that altitude.

Figure 8 shows how the relatively low aerodynamic drag on a tactical ballistic missile can be exploited by building decoys. The figure shows two very low altitude trajectories for much shorter range ballistic missiles, like the Soviet FROG-7 or the newer SS-21. Even though the entire trajectory of these missiles is at relatively low altitudes, the trajectories of the missile and decoys shows that decoys would stay quite close to the missile throughout its trajectory.

Figure 9 shows decoys that were designed to match the very high ballistic coefficient of the FROG-7, which is probably between 3000 and 4000 pounds per square foot. The weight of these decoys is mostly driven by the need for them to be balanced so that they will be stable when they fall nose first (these decoys were designed to have a rather high static margin of about .1). Figures 10 and 11 show data on an electronic decoy and warhead reentry vehicle. A device like that shown in figure 10 might weigh only five or ten pounds and could be used as a SCUD decoy against the PATRIOT radar to very low altitudes. If an adversary used a large number of such decoys per SCUD attack, a PATRIOT-like defense could readily be exhausted. Countries that manufacture and sell SCUDs on the world market could almost certainly build and sell such devices along with SCUDs.

Figure 12 illustrates why a PATRIOT interceptor must get so close to its target to do a high level of damage. The PATRIOT carries a warhead that weighs roughly 100 kilograms. If it is eighty percent by weight fragments of 45 grams and the fragments are isotropically dispersed by the detonation, there will only be about 1 fragment per square meter at a range of about 12 meters and about 10 fragments per square meter at 4 meters. Figure 13 in part shows why such an interceptor is likely to be much more lethal to an aircraft relative to either a missile or warhead. First, the aircraft presents a much larger solid angle for fragments to pass through. Second, there are many components that are critical to the performance of the aircraft which are likely to be hit. Third, and perhaps most important, even if light damage is done to the aircraft it is likely to not be able to perform its mission, or the pilot and plane could be lost before returning to base. Intercepting ballistic missiles is much harder because

1. See *Expensive, But necessary: The PATRIOT Surface-to-Air Missile System*, Military Technology, October 1984

fragments must either hit a sensitive part of the missile or warhead or catastrophic damage must be done to an important but relatively insensitive component of the missile or warhead. It is therefore particularly difficult to inflict enough damage to such systems to stop them from falling and still causing damage.

Figures 14 and 15 show why a low-yield nuclear weapon on an interceptor can be so effective. For example, a 1 kiloton warhead detonating at an altitude of 50 kilofeet would subject an incoming missile to 150 calories per square centimeter (cal/cm^2) thermal radiation at about 130 meters range. At 13 meters, however, the fluence would $15,000 \text{ cal/cm}^2$, enough to vaporize and severely fragment the missile. Thus a quite small nuclear weapon can be highly lethal to an incoming ballistic missile that might otherwise be difficult to stop.

Figures 16, 17, and 18 show the main ground components of the PATRIOT system. The basic characteristics of the radar are shown in figure 16², the different components associated with a "fire unit" are shown in figure 17, and the basic organization of fire units within a PATRIOT "battery" are shown in figure 18. Of particular interest is the characteristics of the PATRIOT radar, which is very powerful for an air defense radar, but relatively small for purposes of anti-missile defense. Because of the small size of this radar it is typically operated as either an air defense search radar or as a missile defense search radar. When it is operated as a missile defense search radar (see figure 19), it must search a large solid angle in the sky, a very demanding task for such a small radar.

Figures 20 through 25 show one of the reasons why missile defense radars need to be large relative to air defense radars. These figures show a series of plots of the radar cross section as a function of radar frequency, missile orientation to the radar, and missile size, for a SCUD-like model missile. In particular, figures 24 and 25 show that the front-on radar cross section of a SCUD-like missile could be reduced by a factor of between 100 and 10000 relative to a non-stealthy missile. Of considerable import is that none of the measures required to achieve this cross section reduction are technically challenging. For example, figure 26 shows commercially available radar absorbing materials that can readily achieve attenuation factors of greater than 1000. If an adversary took such stealth measures against the current PATRIOT system, its radar could not perform the required search function for unaided engagements against such SCUD-like missiles.

Figures 27 through 32 provide data relevant to assessments of the effectiveness of the space-based component of the GPALS system. Figure 27 shows estimates of the degree of lofting and depressing of trajectories that could be achieved by a 500 kilometer range Soviet SCUD follow-on, the SS-23, and a longer range Soviet follow on to the Soviet SS-12 SCALEBOARD, the SS-22. The SS-23 could underfly GPALS to its design range if its payload is lightened by 15 to 20 percent, while the longer range SS-22 would probably suffer a payload loss of about 60 percent. The

-
2. Some of the more important characteristics of the PATRIOT radar set can be found in *Radar Technology*, edited by Eli Brookner, Artech House, Dedham, MA, 1977, page 27 and in *Introduction to Electronic Warfare*, D. Curtis Schleher, Artech House, Dedham, MA, 1986, pages 354 to 356.

payload weights of both systems, however, are compatible with the ability to deliver nuclear weapons of nominal yield. Figure 28 summarizes some of the kinematic properties of SS-23 and SS-22 trajectories.

Figure 29 illustrates the range loss associated with trajectories that are constrained to be below 100 kilometers altitude. As can be seen from the figure, a missile that could carry a full payload to 800 kilometers can carry that payload to 700 kilometers while flying below the GPALS minimum intercept altitude. Longer range missiles, however, suffer a greater range loss to underfly GPALS. The 1500 kilometer range missile shown in figure 28 can only fly to slightly greater than 1000 kilometers and still underfly GPALS. Figures 30 and 31 provide systematic data on the range costs associated with underflying GPALS in tabular (figure 30) and graphical (figure 31) form.

Figure 32 shows the tremendous anti-satellite potential in the Brilliant Pebbles space-based component of GPALS. Figure 32 shows that a Pebble with a 6 km/sec velocity capability could intercept high altitude satellites within 70 minutes of launch. Since there would be of order 1000 interceptors in the Pebbles constellation, there should always be at least one Pebble in an orbital position that allows an instantaneous attack on the of order 100 U.S. or Soviet satellites that are typically operating in space simultaneously.

The ground-based anti-satellite capabilities while substantial, would be limited relative to that of the space-based components. Ground-based interceptors might have maximum engagement altitudes of perhaps 500 to 1000 kilometers, and they would have to wait for a satellite to be at a particular range of orbital positions before an attack could be executed.

-APPENDIX TO TESTIMONY-

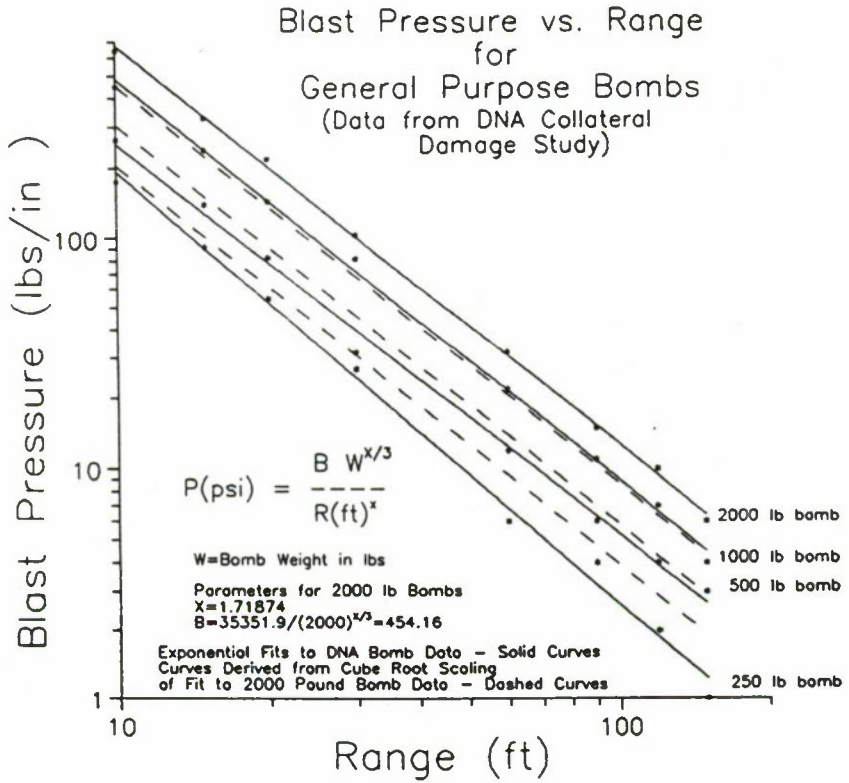


Figure 1

י ש ר א ל ב מ ל ח מ ת ה מ פ ר ז

דו"ח מעריב
גליון פיוחד. יום ו', י"ד בניסן תשנ"א, 29.3.91



■ ערב המלחמה הגיע מידע לאגף המודיעין: לעירקים יש טיל עם ראש נפץ כימי

■ מנהל משרד ראש הממשלה נפגש עם פקיד בכיר ירדני והבטיח "לא נפגע בכם"

■ מחקר סורי בצה"ל: מאות היו נהרגים, אם הטיל הראשון שנפל בת"א היה כימי

■ הכיתות בבתי הספר לא מוגנו כי משרד החינוך האמין שצה"ל יגיב ב"זבנג וגמרנו"

Figure 2

הטילים שפגעו בישראל. סיכום נזקים

יזם ותאריך	סך פילים	אזור הפגיעה	נזקים	מצב שיקום הנזק
ר', 18.1	6	תל אביב-יפו	נפגעו 648 מבנים, שחוסם מיועדים 31 לחריסה, נסבבים נפגעו 1,009 דירות, 45 נזרים	רק 4 דירות נזרים עד כה, הושלם שיפוץ של כמחצית הדירות, 89 שופצו וסודות, נבני 11 דירות לא הוחלט עדיין מה לעשות
שבת, 19.1	2	חיפה	נפגעו 100 דירות, 100 חנויות ופירוק סמטתו נזר בנתי, הנזק נאמך 1.7 מיליון ש"ח	כל הדירות שופצו, שיפוץ חסרבו המסחרי יסתיים כעל
ר', 22.1	1	תל אביב-יפו	נפגעו 157 מבנים, שחוסם מיועדים 31 לחריסה, נסבבים נפגעו 1,009 דירות, 45 נזרים	רק 4 דירות נזרים עד כה, הושלם שיפוץ של כמחצית הדירות, 89 שופצו וסודות, נבני 11 דירות לא הוחלט עדיין מה לעשות
ד', 23.1	1	חיפה	נפגעו 100 דירות, 100 חנויות ופירוק סמטתו נזר בנתי, הנזק נאמך 1.7 מיליון ש"ח	כל הדירות שופצו
ר', 25.1	6	תל אביב-יפו	נפגעו 157 מבנים, שחוסם מיועדים 31 לחריסה, נסבבים נפגעו 1,009 דירות, 45 נזרים	רק 4 דירות נזרים עד כה, הושלם שיפוץ של כמחצית הדירות, 89 שופצו וסודות, נבני 11 דירות לא הוחלט עדיין מה לעשות
שבת, 26.1	3	מרכז הארץ	נפגעו 157 מבנים, שחוסם מיועדים 31 לחריסה, נסבבים נפגעו 1,009 דירות, 45 נזרים	רק 4 דירות נזרים עד כה, הושלם שיפוץ של כמחצית הדירות, 89 שופצו וסודות, נבני 11 דירות לא הוחלט עדיין מה לעשות
ב', 26.1	1	מרכז הארץ	נפגעו 157 מבנים, שחוסם מיועדים 31 לחריסה, נסבבים נפגעו 1,009 דירות, 45 נזרים	רק 4 דירות נזרים עד כה, הושלם שיפוץ של כמחצית הדירות, 89 שופצו וסודות, נבני 11 דירות לא הוחלט עדיין מה לעשות
ה', 31.1	1	מרכז הארץ	נפגעו 157 מבנים, שחוסם מיועדים 31 לחריסה, נסבבים נפגעו 1,009 דירות, 45 נזרים	רק 4 דירות נזרים עד כה, הושלם שיפוץ של כמחצית הדירות, 89 שופצו וסודות, נבני 11 דירות לא הוחלט עדיין מה לעשות
שבת, 2.2	2	מרכז הארץ	נפגעו 157 מבנים, שחוסם מיועדים 31 לחריסה, נסבבים נפגעו 1,009 דירות, 45 נזרים	רק 4 דירות נזרים עד כה, הושלם שיפוץ של כמחצית הדירות, 89 שופצו וסודות, נבני 11 דירות לא הוחלט עדיין מה לעשות
א', 3.2	1	מרכז הארץ	נפגעו 157 מבנים, שחוסם מיועדים 31 לחריסה, נסבבים נפגעו 1,009 דירות, 45 נזרים	רק 4 דירות נזרים עד כה, הושלם שיפוץ של כמחצית הדירות, 89 שופצו וסודות, נבני 11 דירות לא הוחלט עדיין מה לעשות
שבת, 9.2	1	מרכז הארץ	נפגעו 157 מבנים, שחוסם מיועדים 31 לחריסה, נסבבים נפגעו 1,009 דירות, 45 נזרים	רק 4 דירות נזרים עד כה, הושלם שיפוץ של כמחצית הדירות, 89 שופצו וסודות, נבני 11 דירות לא הוחלט עדיין מה לעשות
ב', 11.2	1	מרכז הארץ	נפגעו 157 מבנים, שחוסם מיועדים 31 לחריסה, נסבבים נפגעו 1,009 דירות, 45 נזרים	רק 4 דירות נזרים עד כה, הושלם שיפוץ של כמחצית הדירות, 89 שופצו וסודות, נבני 11 דירות לא הוחלט עדיין מה לעשות
ר', 12.2	3	מרכז הארץ	נפגעו 157 מבנים, שחוסם מיועדים 31 לחריסה, נסבבים נפגעו 1,009 דירות, 45 נזרים	רק 4 דירות נזרים עד כה, הושלם שיפוץ של כמחצית הדירות, 89 שופצו וסודות, נבני 11 דירות לא הוחלט עדיין מה לעשות
שבת, 14.2	1	מרכז הארץ	נפגעו 157 מבנים, שחוסם מיועדים 31 לחריסה, נסבבים נפגעו 1,009 דירות, 45 נזרים	רק 4 דירות נזרים עד כה, הושלם שיפוץ של כמחצית הדירות, 89 שופצו וסודות, נבני 11 דירות לא הוחלט עדיין מה לעשות
ר', 19.2	1	מרכז הארץ	נפגעו 157 מבנים, שחוסם מיועדים 31 לחריסה, נסבבים נפגעו 1,009 דירות, 45 נזרים	רק 4 דירות נזרים עד כה, הושלם שיפוץ של כמחצית הדירות, 89 שופצו וסודות, נבני 11 דירות לא הוחלט עדיין מה לעשות
שבת, 23.2	1	מרכז הארץ	נפגעו 157 מבנים, שחוסם מיועדים 31 לחריסה, נסבבים נפגעו 1,009 דירות, 45 נזרים	רק 4 דירות נזרים עד כה, הושלם שיפוץ של כמחצית הדירות, 89 שופצו וסודות, נבני 11 דירות לא הוחלט עדיין מה לעשות
ב', 25.2	2	מרכז הארץ	נפגעו 157 מבנים, שחוסם מיועדים 31 לחריסה, נסבבים נפגעו 1,009 דירות, 45 נזרים	רק 4 דירות נזרים עד כה, הושלם שיפוץ של כמחצית הדירות, 89 שופצו וסודות, נבני 11 דירות לא הוחלט עדיין מה לעשות

הערות:
 * נתונים נכונים ליום 15 במרץ 1991.
 * מרכז הפעלה הפיל על הדרך תל אביב-יפו 148 פגיעות, 180 ש"ח, 1,865 דירות, נזרים 793 בנתי, הנזק נאמך 1.7 מיליון ש"ח.
 * מרכז הפעלה הפיל על הדרך תל אביב-יפו 148 פגיעות, 180 ש"ח, 1,865 דירות, נזרים 793 בנתי, הנזק נאמך 1.7 מיליון ש"ח.
 * מרכז הפעלה הפיל על הדרך תל אביב-יפו 148 פגיעות, 180 ש"ח, 1,865 דירות, נזרים 793 בנתי, הנזק נאמך 1.7 מיליון ש"ח.
 * מרכז הפעלה הפיל על הדרך תל אביב-יפו 148 פגיעות, 180 ש"ח, 1,865 דירות, נזרים 793 בנתי, הנזק נאמך 1.7 מיליון ש"ח.
 * מרכז הפעלה הפיל על הדרך תל אביב-יפו 148 פגיעות, 180 ש"ח, 1,865 דירות, נזרים 793 בנתי, הנזק נאמך 1.7 מיליון ש"ח.

יום ב', יר' מיליון הש"ח 19.2

Figure 3

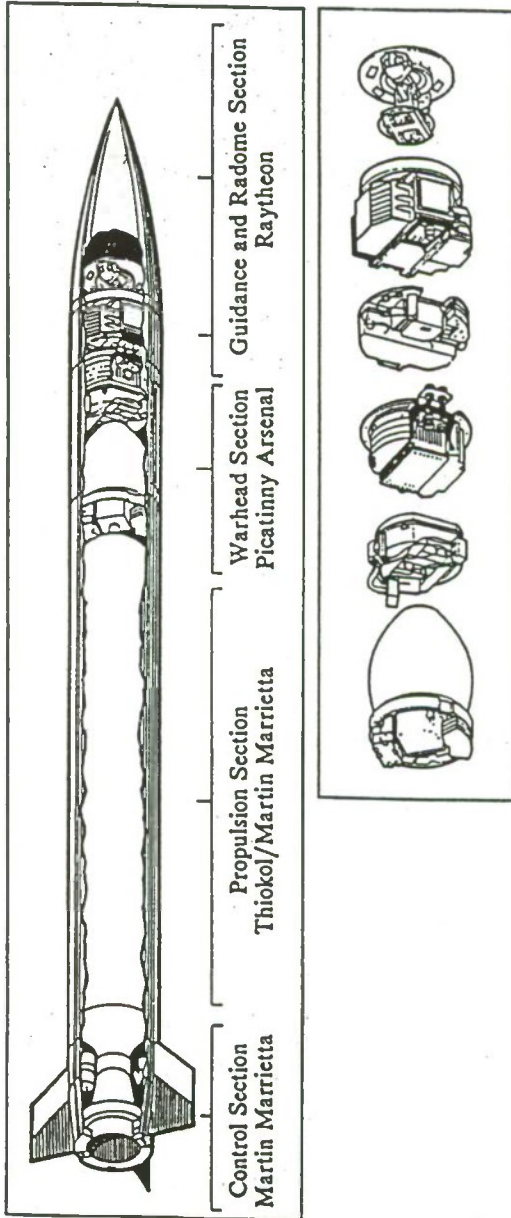
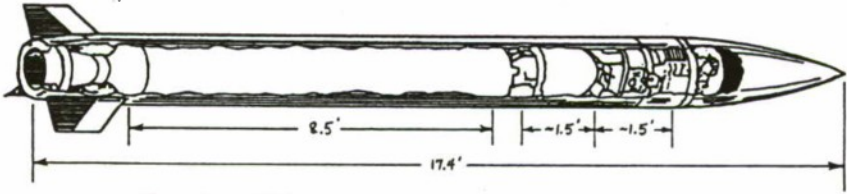


Figure 4



Baseline Patriot

Missile Weight ≈ 2200 lbs

Propellant Weight ≈ 1100 lbs

Body Structure ≈ 600 lbs

Warhead ≈ 250 lbs

Guidance and Radome ≈ 250 lbs

Propellant $I_{sp} \approx 260$ sec

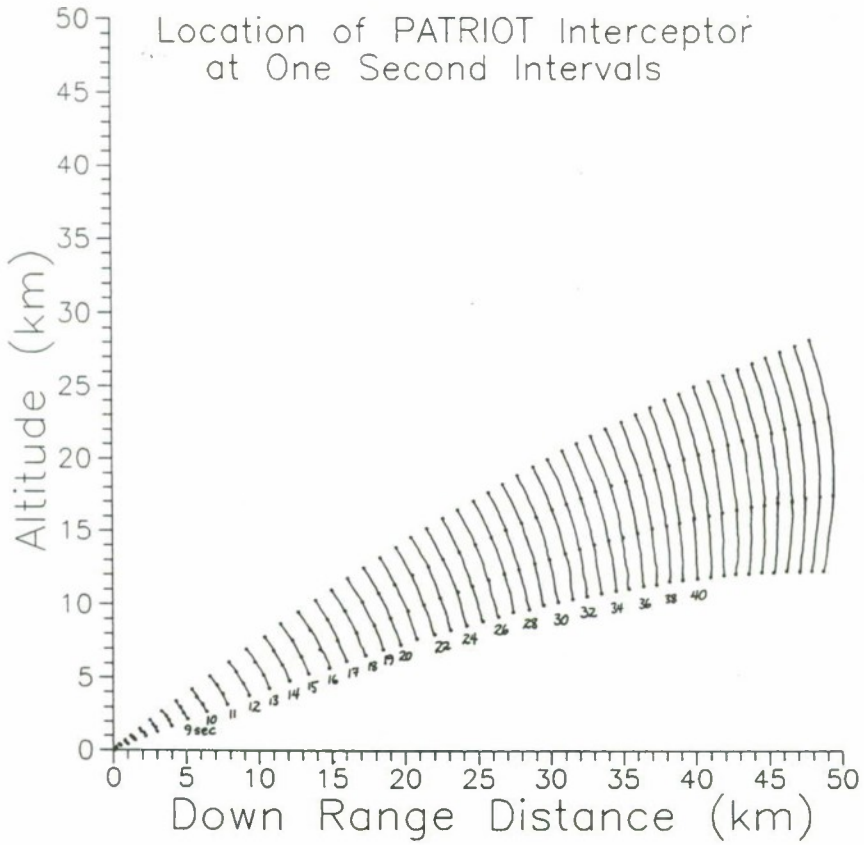
Propellant Density = $.065$ lbs/in³

Volumetric Loading ≈ 0.95

Axial Acceleration (Boost) $\sim 15-20$ G

Cruise Speed = Mach 3

Figure 5

**Figure 6**

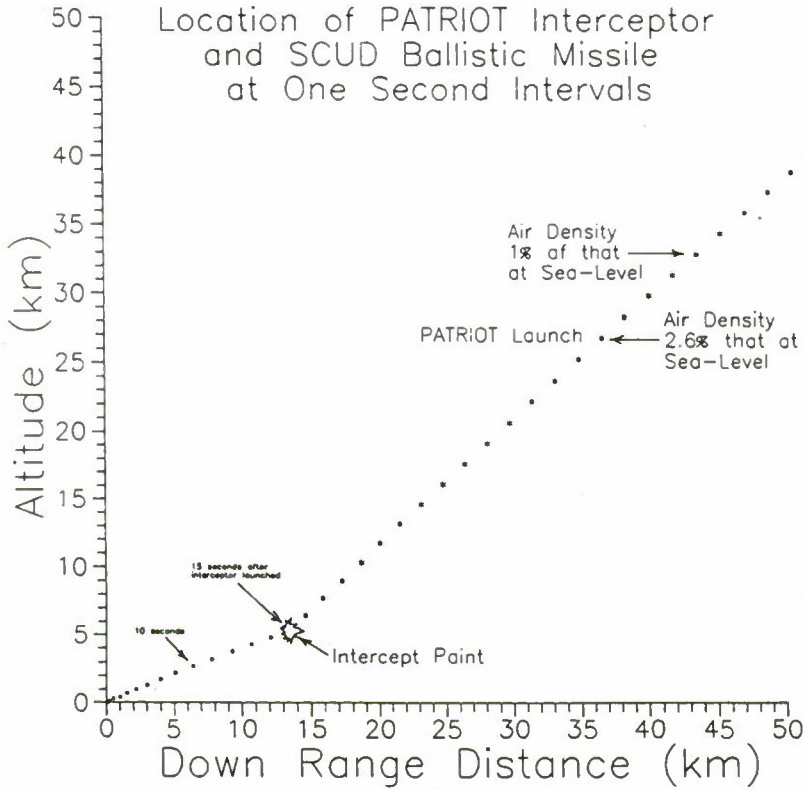
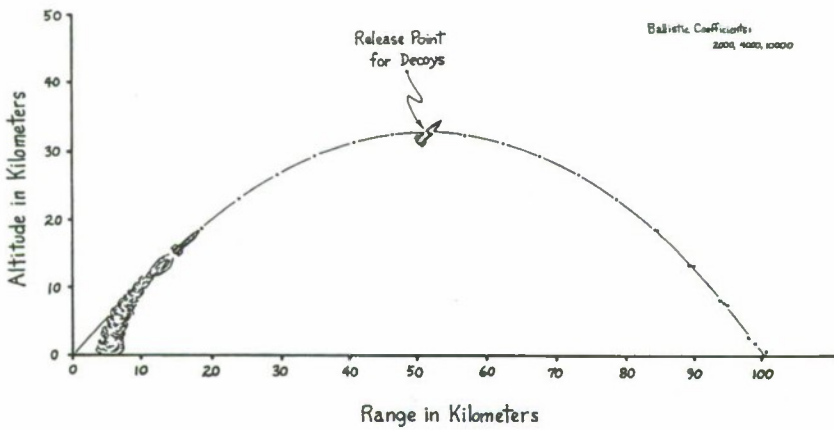
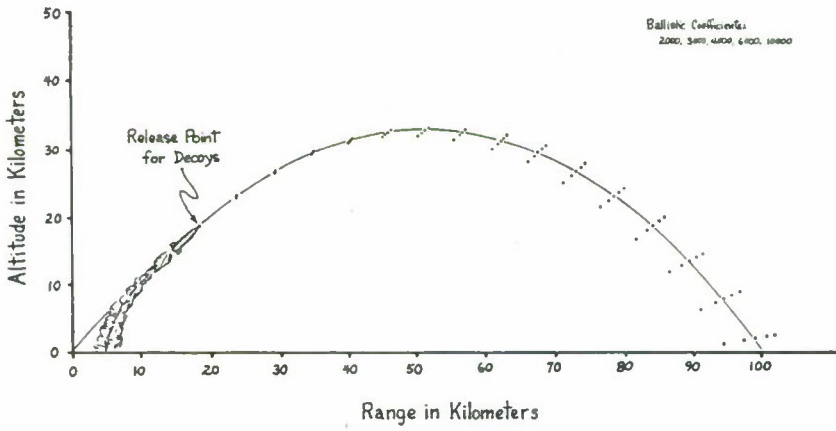


Figure 7

**Figure 8**

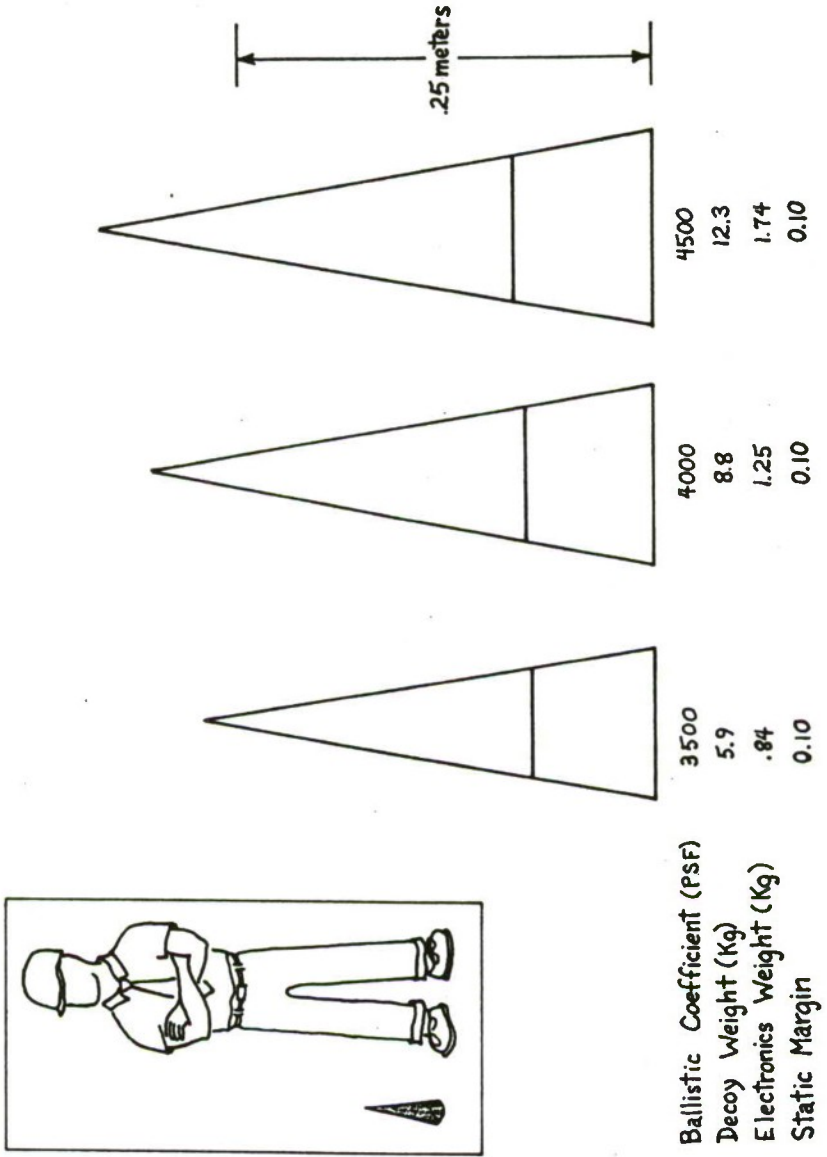


Figure 9



BRV ACTIVE DECOY - CURRENT CONCEPT

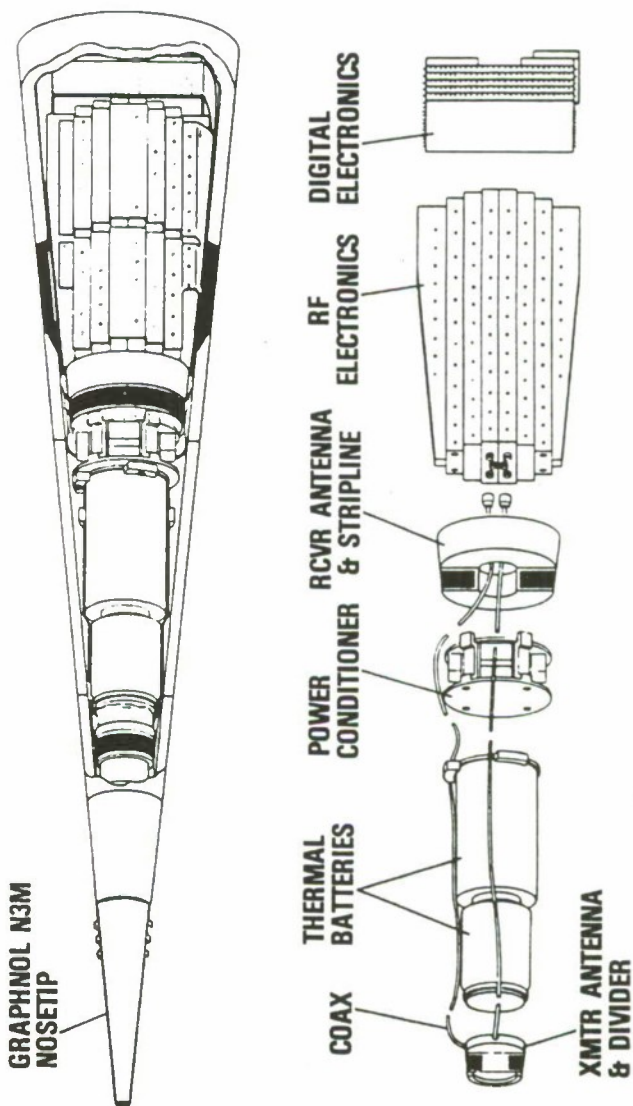
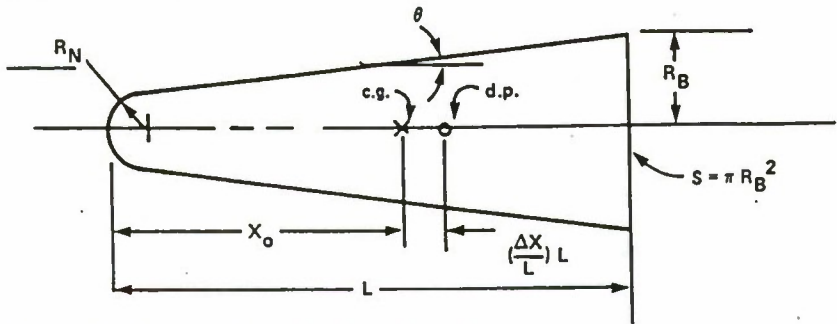


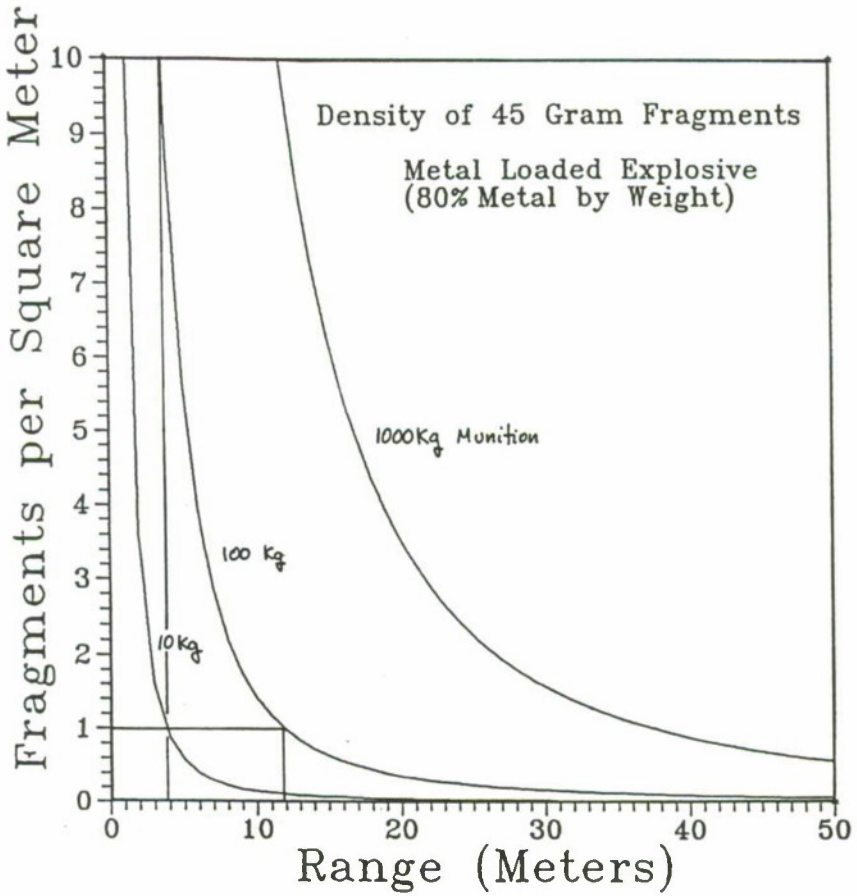
Figure 10

Representative RV Characteristics



Nose radius, cm (in.)	1.98 (0.77)
Base radius, cm (in.)	22 (8.67)
Bluntness, R_N/R_B (-)	0.09
Reference length, $d = 2R_B$, cm (in.)	44 (17.34)
Length, L , m (ft)	1.52 (5)
Mass, kg (slugs)	92. (6.3)
Reference area, $S = \pi R_B^2$, m^2 (ft^2)	0.152 (1.64)
Roll moment of inertia, I_x , kg/m^2 ($slug/ft^2$)	0.972 (0.72)
Pitch moment of inertia, I_y , kg/m^2 ($slug/ft^2$)	9.32 (6.88)
Yaw moment of inertia, I_z , kg/m^2 ($slug/ft^2$)	9.32 (6.88)
c.g. from nose, X_0/L (-)	0.61
Static margin, $\Delta X_0/L$ (-)	0.071
Pitching moment derivative, C_{m_α} (-)	-0.520
Normal force derivative, C_N (-)	2.15
Pitch damping force, C_{N_α} (-)	-0.35
Pitch damping moment, C_{m_q} (-)	-8.0
Drag coefficient, C_D (-)	0.10
Ballistic factor, β , Pa (lbs/ ft^2)	6×10^4 (1254)
Pitch/yaw radius of gyration, $K_y = I_y/M$, m (ft)	0.318 (1.045)
Stability factor, P_s , m/kg (ft/slug)	3.73×10^{-3} (0.179)

Figure 11



$R_2 \sim 4-12 \text{ m}$ for 1 to 10 hits on a 1 m^2 target

Figure 12

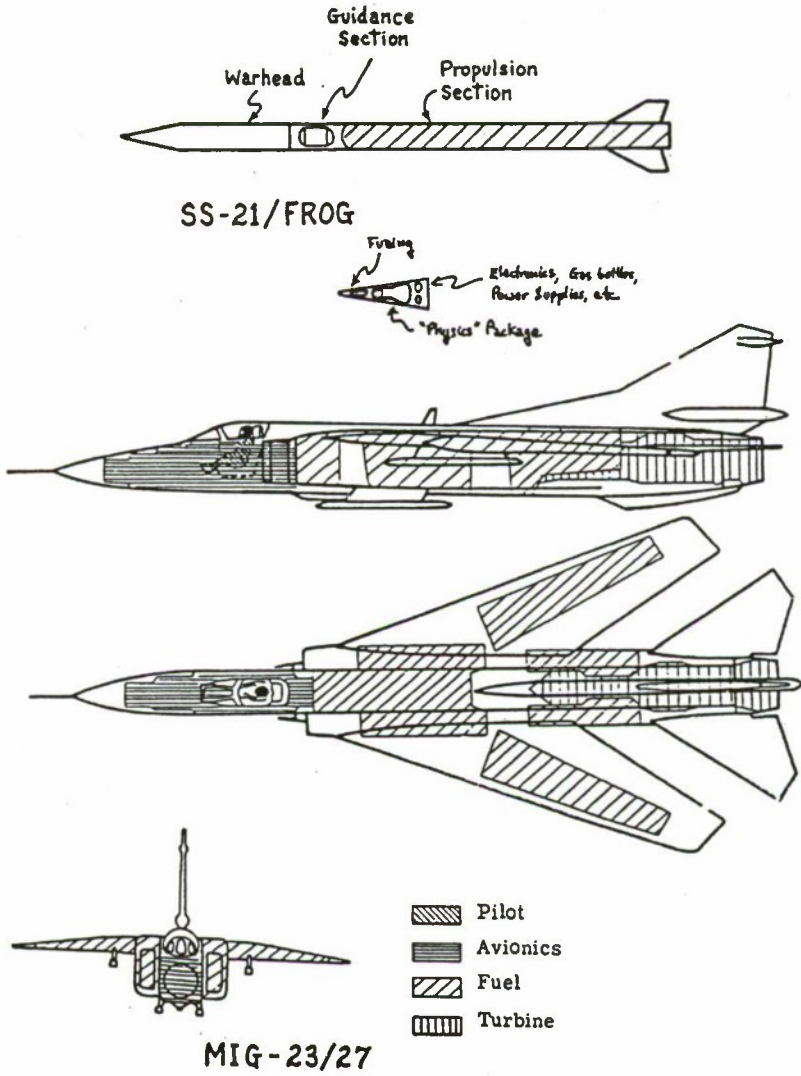


Figure 13

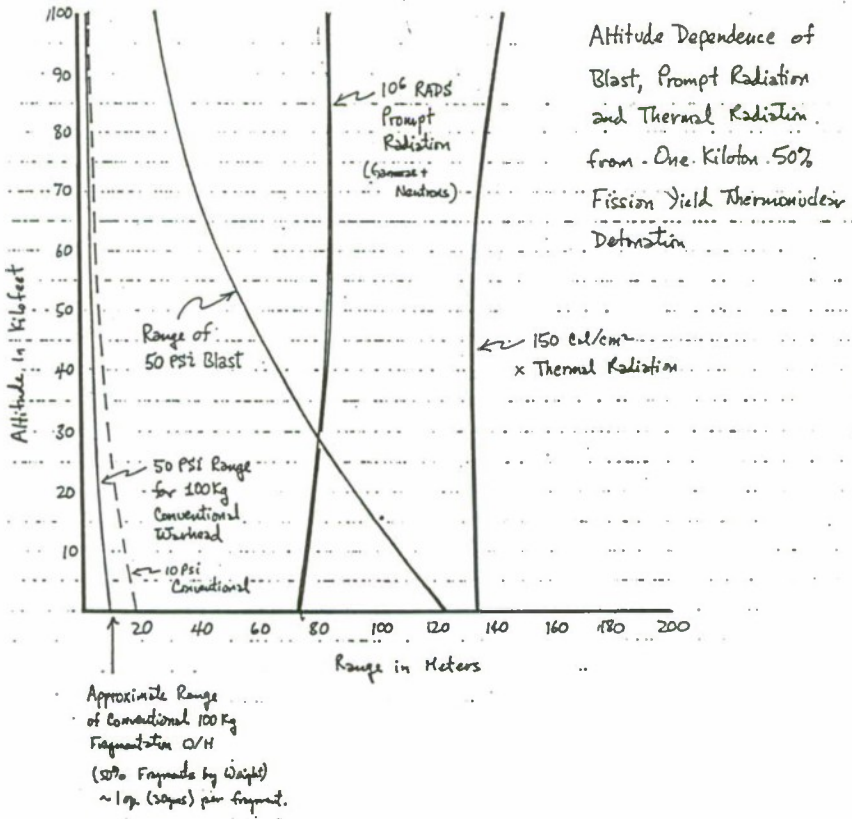
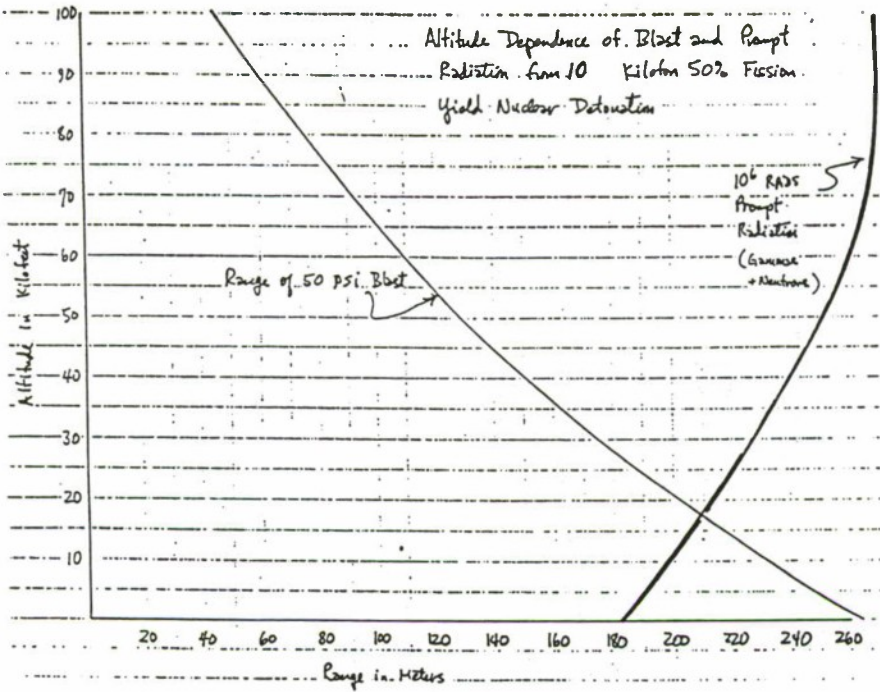
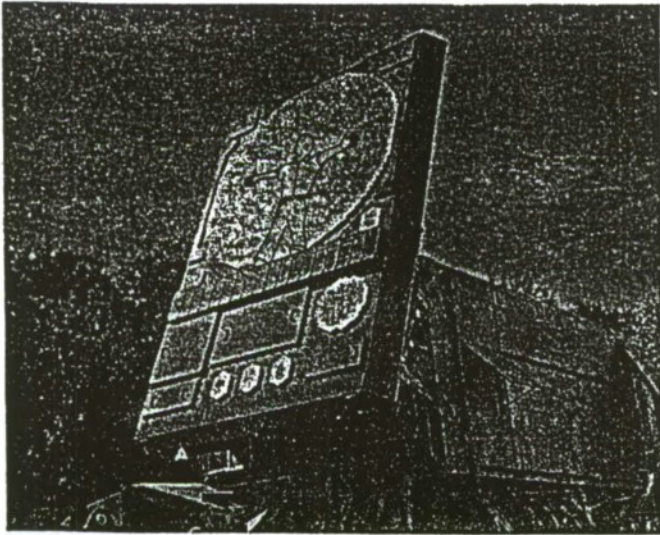


Figure 14



50 cal/cm² Thermal occurs at ~ 430-450 m

Figure 15



Antenna
Diameter
~ 7.9 ft

Multifunction Phased Array Radar of PATRIOT
(Formerly SAM-D) Tactical Air-Defense System

Space-Fed Phased Array

5161 Ferrite Phase Shifters

Peak Power ≥ 100 KW

Average Power ≥ 10 KW

Frequency ≈ 5 GHz

Antenna Aperture = 45 m^2

Prime Power (Engagement Control
and Radar Stations)

2-150 KW/400 Hz Turbine Generators

Figure 16

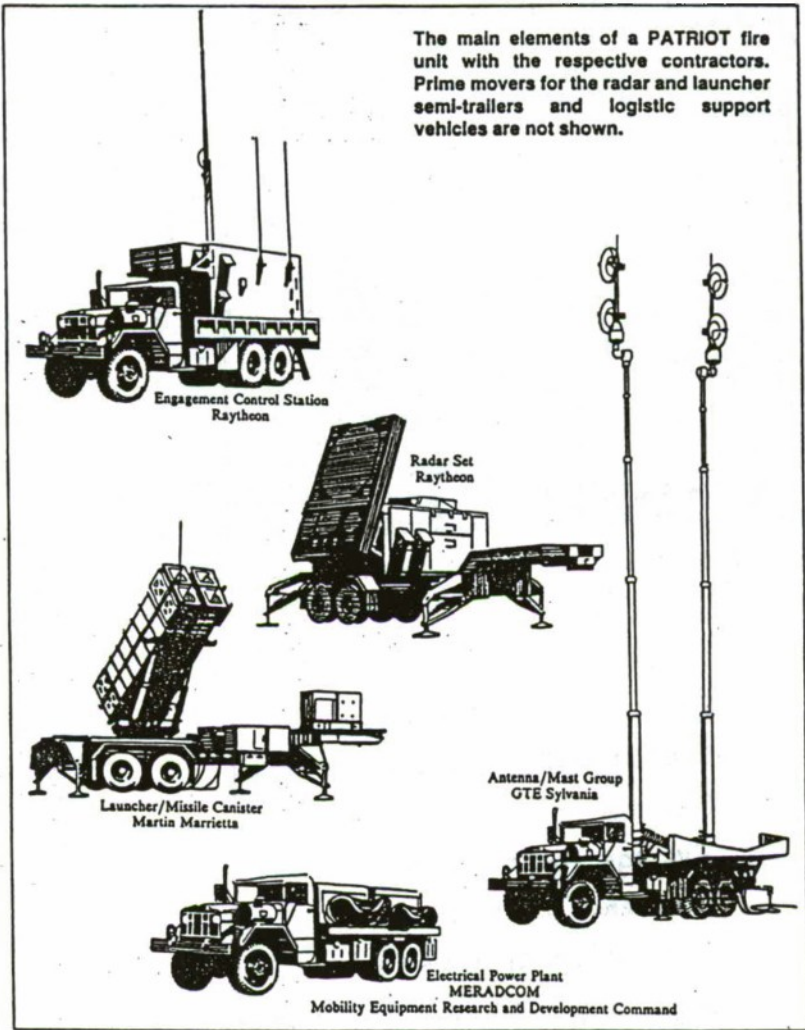


Figure 17

Schematic organisation of a PATRIOT battalion, with links to adjacent battalions. The eight launchers for each fire unit are not shown, as well as all the logistic support vehicles, the prime movers, the generator sets, etc.

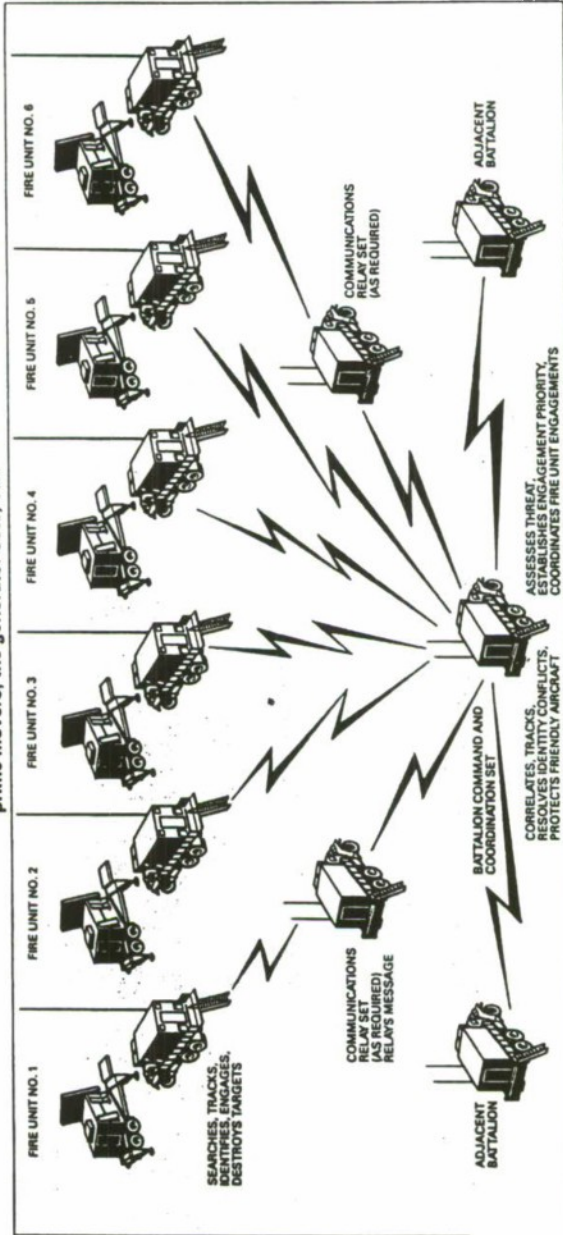


Figure 18

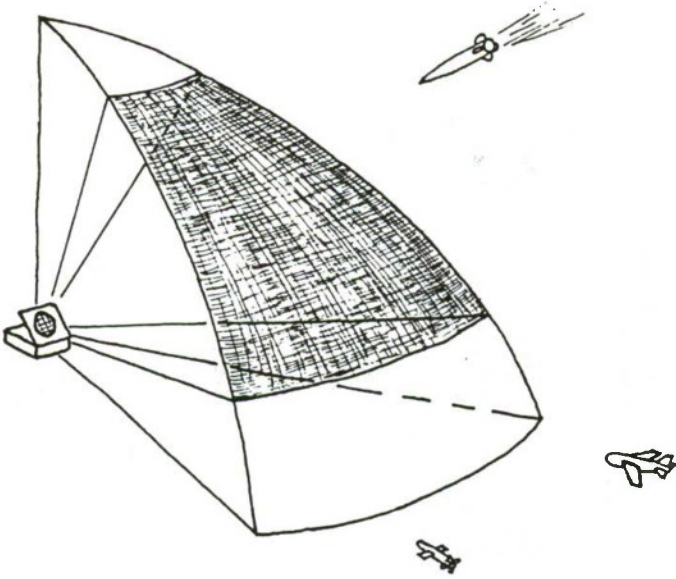
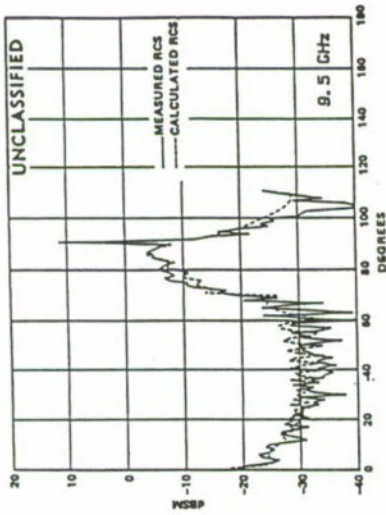
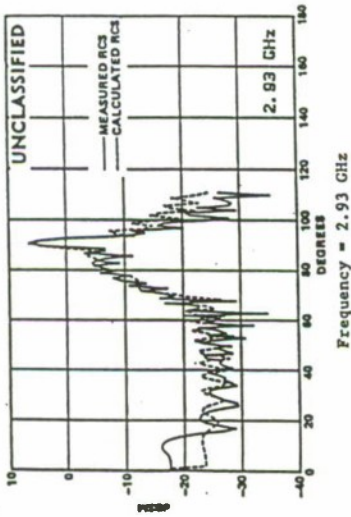


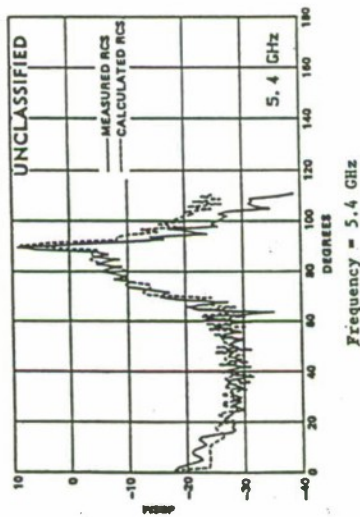
Figure 19



Frequency = 9.5 GHz



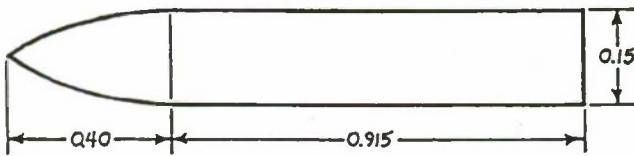
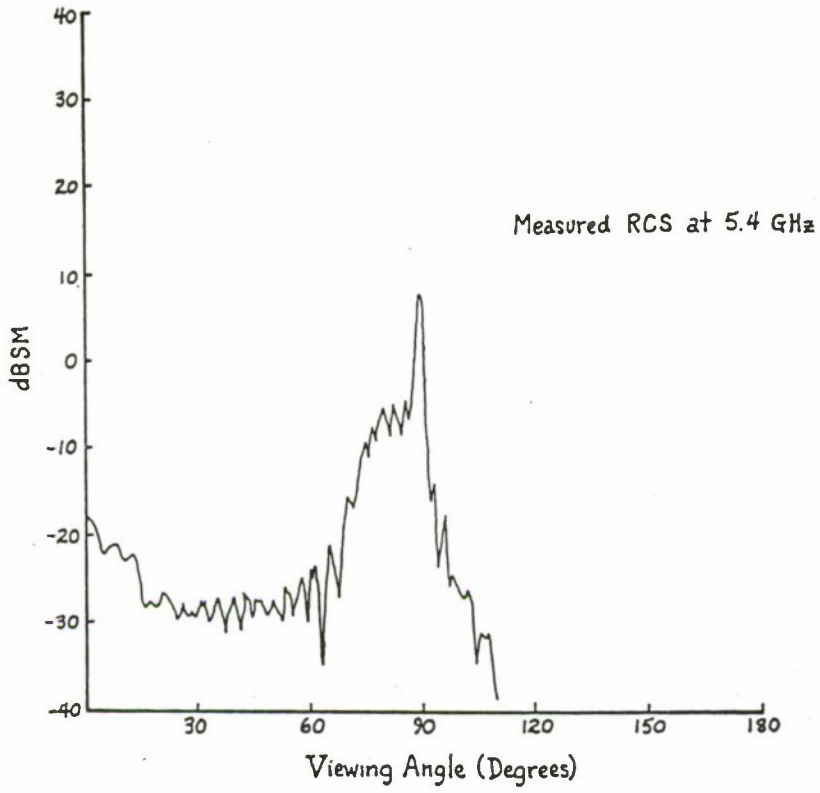
Frequency = 2.93 GHz



Frequency = 5.4 GHz

Comparison of measured and predicted results for a cylinder with an ogive nose,
horizontal incident polarization

Figure 20

**Figure 21**

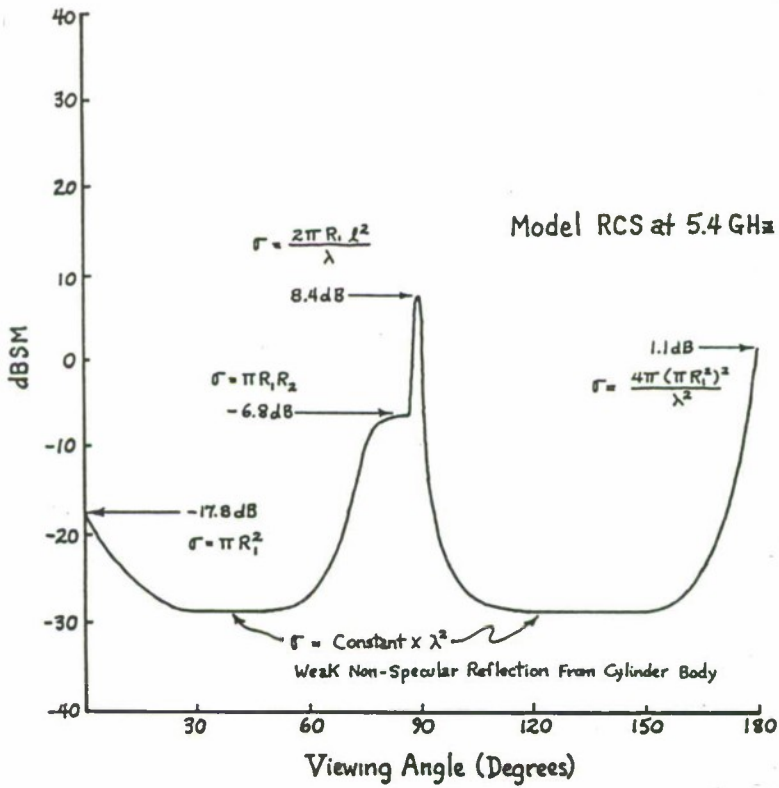
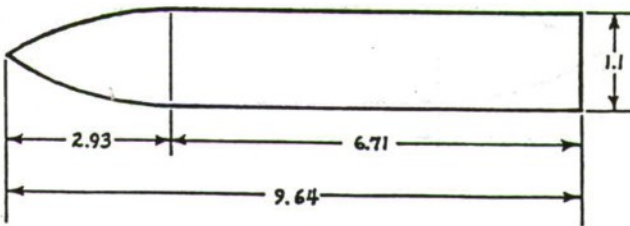
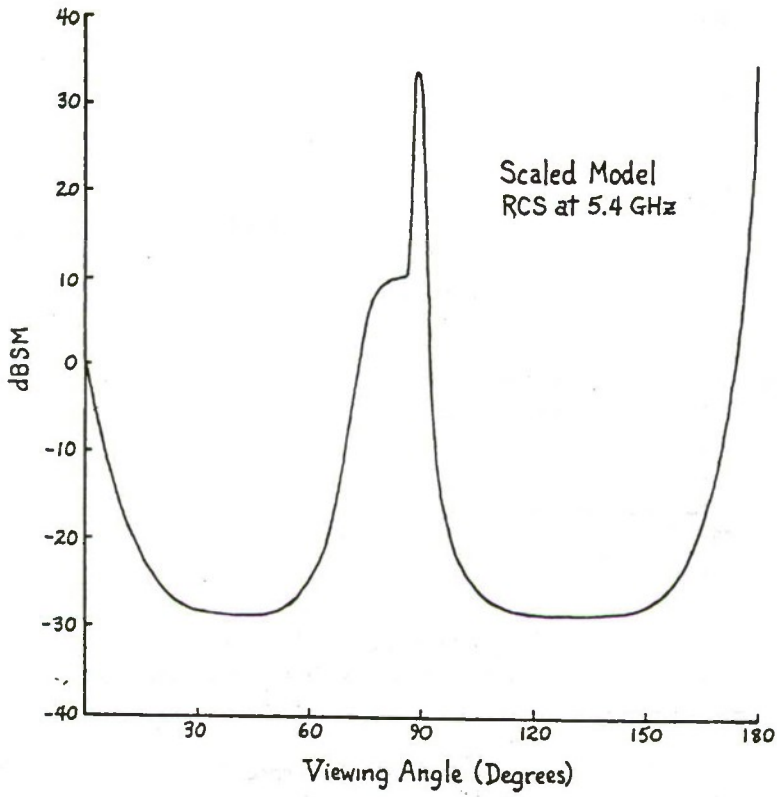
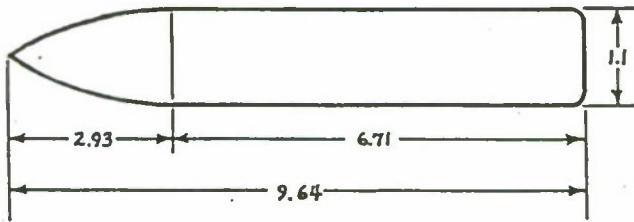
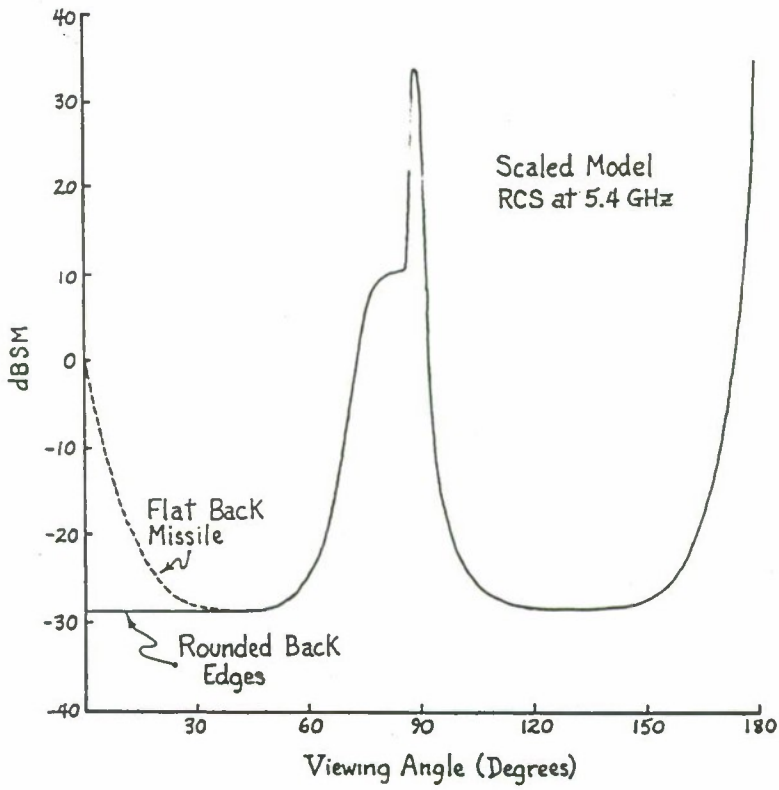
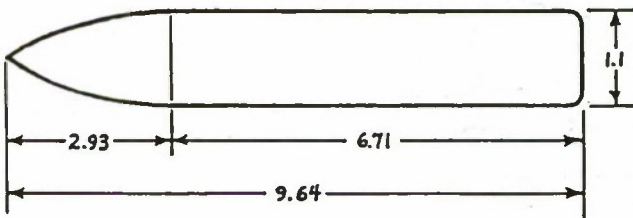
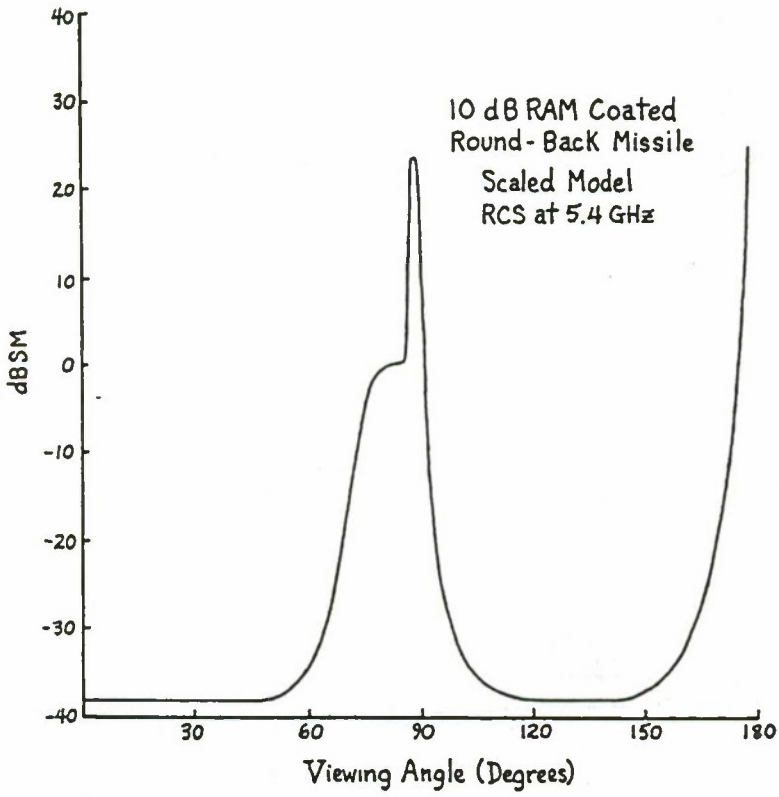
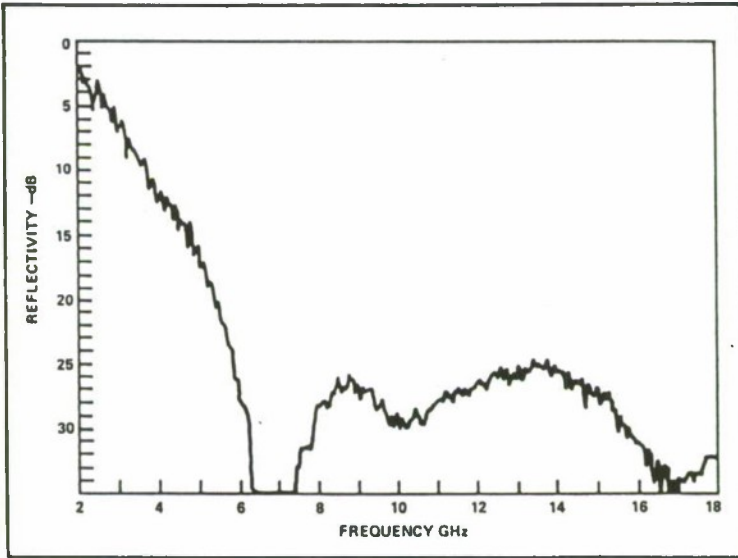


Figure 22

**Figure 23**

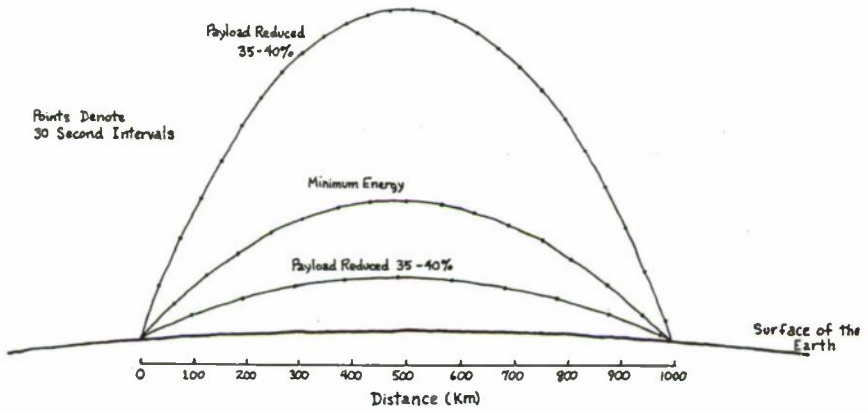
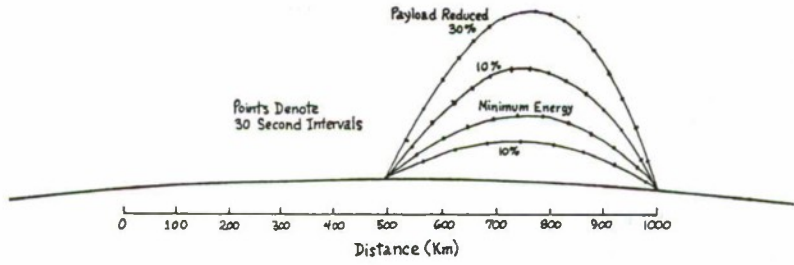
**Figure 24**

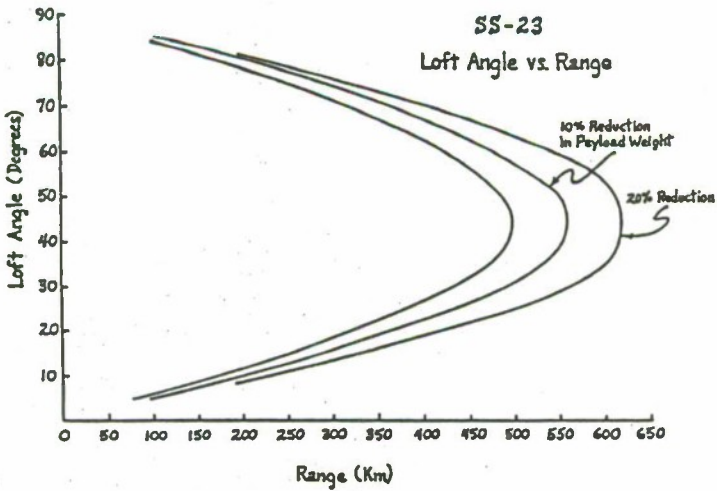
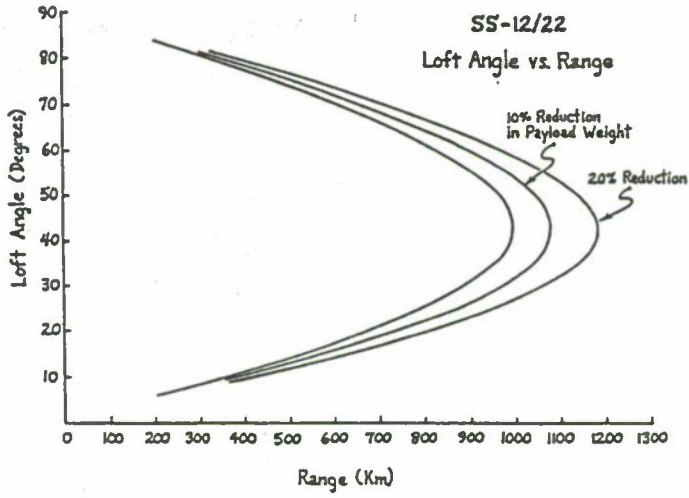
**Figure 25**



Broadband absorber—graded dielectric reticulated foam absorber 0.75 inch thick, 3 ounces per square foot.

Figure 26

**Figure 27**

**Figure 28**

Maximum Range and Depressed Trajectory Tactical Ballistic Missile Trajectories

Missile Locations Shown
at 20 second Intervals

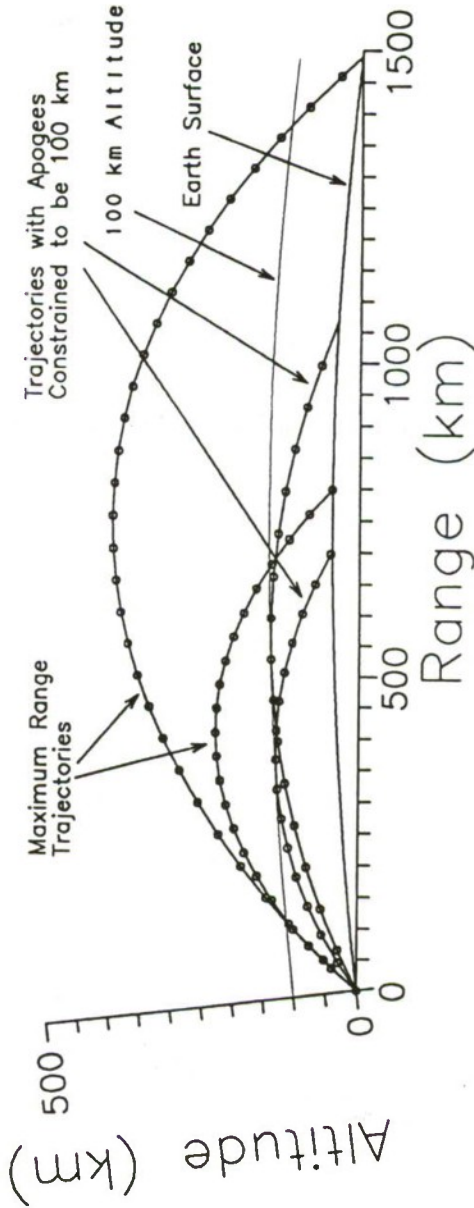


Figure 29

Spherical Earth Ballistic Trajectories

Maximum Range (Minimum Energy Trajectories)						Trajectories Constrained to Have Apogees Below 100 km		
Range to Target (km)	Max. Altitude (km)	Optimal Velocity (km/sec)	Optimal Reentry Angle (Deg)	Range Angle (Deg)	Time of Flight (min)	Range (km)	Reentry Angle (Deg)	Flight Time (min)
100	24.9	0.99	44.78	0.90	2.39	-	-	-
200	49.6	1.39	44.55	1.80	3.40	-	-	-
300	74.2	1.70	44.33	2.69	4.19	-	-	-
400	98.5	1.95	44.10	3.59	4.86	-	-	-
500	122.6	2.17	43.88	4.49	5.46	491	38.7	4.94
600	146.5	2.37	43.65	5.39	6.01	570	34.6	4.97
700	170.2	2.55	43.43	6.29	6.52	640	31.6	5.01
800	193.7	2.72	43.20	7.19	7.01	704	29.1	5.04
900	217.0	2.87	42.98	8.08	7.47	760	27.1	5.06
1000	240.1	3.01	42.75	8.98	7.91	818	25.7	5.13
1500	352.4	3.62	41.63	13.47	9.92	1064	20.3	5.33
2000	459.2	4.11	40.51	17.96	11.70	1300	17.0	5.52
3000	655.9	4.86	38.26	26.94	14.93	-	-	-
4000	829.0	5.43	36.02	35.93	17.87	-	-	-
5000	977.5	5.88	33.77	44.91	20.63	-	-	-
6000	1100.4	6.25	31.53	53.89	23.23	-	-	-
7000	1197.0	6.55	29.28	62.87	25.70	-	-	-
8000	1266.7	6.80	27.04	71.85	28.02	-	-	-
9000	1309.0	7.02	24.79	80.83	30.20	-	-	-
10000	1323.7	7.20	22.55	89.81	32.22	-	-	-

Figure 30

Range Loss for Ballistic Trajectories
Constrained to Have Apogees
Below 100 km

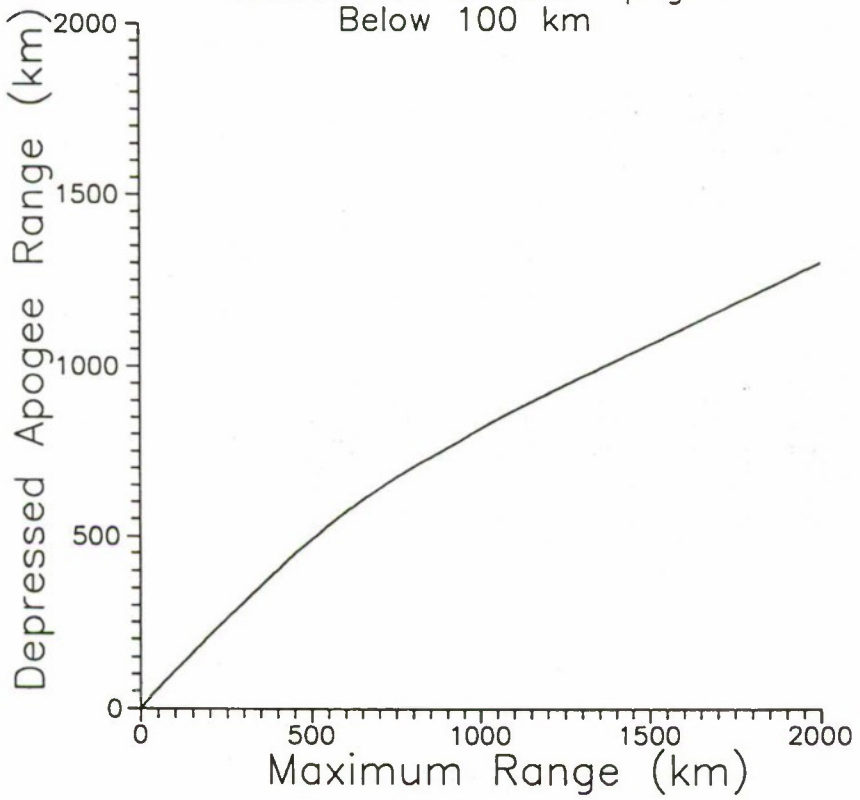


Figure 31

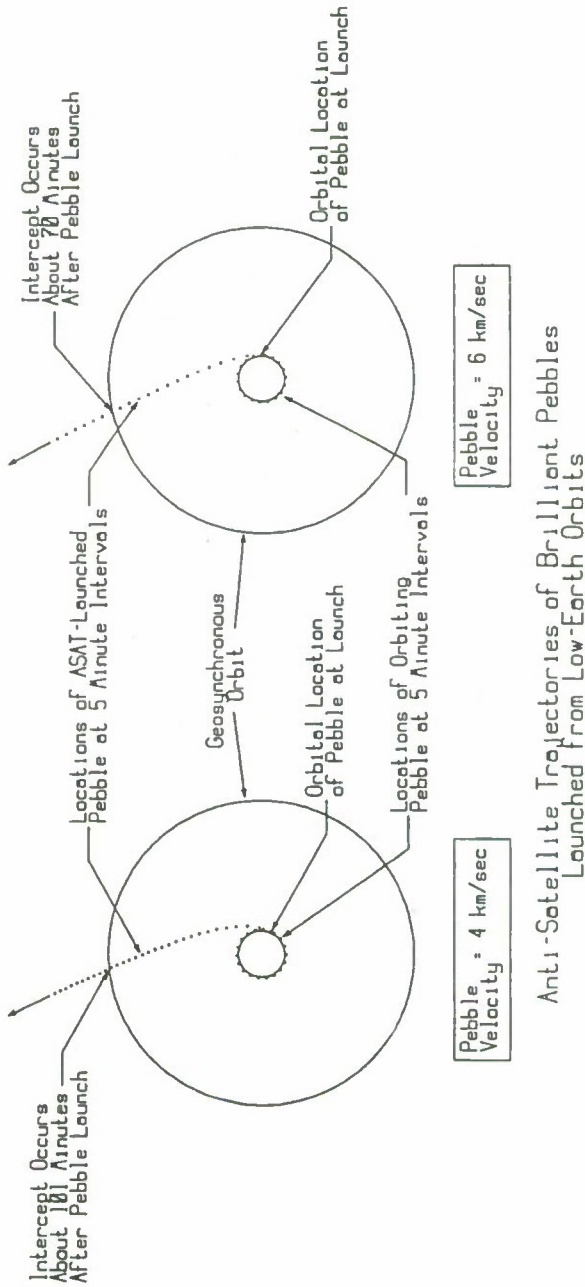


Figure 32

The CHAIRMAN. Thank you, Dr. Postol.
Dr. Carnesale.

**STATEMENT OF ALBERT CARNESALE, PROFESSOR OF PUBLIC
POLICY AND ADMINISTRATION, JOHN F. KENNEDY SCHOOL OF
GOVERNMENT, HARVARD UNIVERSITY**

Dr. CARNESALE. Thank you, Mr. Chairman, for inviting me to express my views on the future of the Strategic Defense Initiative.

I will summarize my written testimony which has been provided to the Members.

Three questions provide the structure of my remarks. First, what has changed in the world of ballistic missile defense since the mid-1980s heyday of the SDI? Second, how have these changes affected the arguments for and against ballistic missile defense? Third, what are the implications of all this for the future of SDI?

I begin by identifying six important changes that have occurred in the world of ballistic missile defense. First and probably foremost is the political push given to all forms of ballistic missile defense by the perceived success of the Patriot missile system in the Persian Gulf War. My use of the term "perceived" success is intended to reflect the fact that we do not yet know the extent to which the Patriot system actually reduced the damage that would otherwise have been inflicted by Scud attacks. Despite this ignorance, however, the widespread perception is that Patriot was very effective. As a result, the Gulf War has given a political boost to the SDI.

There is more than a touch of irony in Patriot's being a source of revitalized interest in the SDI. Patriot predates the SDI by well more than decade. It was the promise of Patriot's development predecessor, SAM-D, for surface-to-air missile D, that provided the incentive for the United States to confine the limitations of the ABM Treaty to systems for defense against strategic ballistic missiles. That is, to screen from treaty constraints systems for defense against theater ballistic missiles. When the Strategic Defense Initiative Organization, SDIO, was created more than a decade after the treaty was ratified, the Patriot and other anti-theater ballistic missile systems intentionally were excluded from SDIO jurisdiction.

In short, Patriot is about as far removed from the SDI as any American system for defense against ballistic missiles could be.

The second major change in the world of ballistic missile defense has been the recession of the Soviet military threat. While the Soviets still maintain a strategic arsenal far more than sufficient to inflict mortal damage on the United States, the likelihood of Soviet actions leading to such a disaster has decreased markedly. Accordingly, there is less need than before to enhance strategic deterrence by deploying defenses intended to complicate a Soviet first strike. Indeed, to the extent that some thought it necessary to deploy strategic defenses to deal with half of the Soviet's force of heavy ICBMs, the START Agreement, if and when implemented, will accomplish that feat perfectly and at near zero cost.

The third change is in the mission to be performed by strategic defenses. No longer is serious consideration given to meeting the

extraordinarily demanding goal of transcending deterrence; that is, to replacing offensive deterrence by perfect or near-perfect defenses. Nor does there seem to be much attention paid to enhancing deterrence by blunting a disarming first strike, or to limiting damage if deterrence of the Soviet Union should fail. Rather, the current focus of SDIO is on the far less demanding mission of protecting against limited strikes. A limited strike is an attack consisting of no more than about 100 reentry vehicles, which corresponds to about 2 percent of the reentry vehicles permitted in the Soviet arsenal under the START Agreement. This modest goal is a far cry from the "defense dominance" aspiration of yesteryear.

Fourth among the changes is a move from defensive systems based on optimistic expectations of scientific breakthroughs to systems based on technologies in hand, within our grasp, or at least dimly in sight. Gone are the grossly exaggerated claims about near-term applications of lasers and neutral particle beams. We are back to good old-fashioned rocket-propelled interceptor missiles, probably fired from the ground, although some space enthusiasts are eager to base some of these interceptors in orbit around the earth.

The fifth change in the world of ballistic missile defense is the proliferation of ballistic missiles. Such missiles already are incorporated in the military forces of almost 20 countries. Many of these missiles could threaten U.S. forces overseas, our allies and our friends. Only the Soviet Union, China and for purposes of completeness, France and the United Kingdom, have the capability today to reach the United States with ballistic missiles armed with nuclear weapons. India and Israel could join the list within a decade or so, but few if any other nations are likely to do so.

The sixth important change is in the domain of defense resources. Unlike the mid-1980s, now almost everyone expects the defense resource pie to shrink in the years ahead. Any significant increase in funding for SDI would require a compensating sacrifice elsewhere in the Department of Defense.

Let me now turn very briefly to the second question that structures my remarks. Namely, how have these six changes in the world of ballistic missile defense affected arguments on both sides of the BMD debate?

I will skip over the analysis in my prepared statement and go directly to the bottom line for this question. I conclude that the changes in the world of ballistic missile defense bolster the already strong case for improving and expanding deployments of defenses against theater ballistic missiles. Their effect on the case for moving toward widespread deployment of strategic defenses also is favorable but is not decisive. The strategic defense debate will continue.

I now turn to the third and final question that structures my remarks. What are the implications of all this for the future of the SDI? It is worth trying to set aside a few issues that need not appear on the agenda for the ballistic missile defense debate. First, we need not argue now about the feasibility or desirability of deploying strategic defenses to transcend deterrence, or to enhance deterrence, or to limit damage against a large-scale attack of the kind that could be mounted by the Soviet Union. Few maintain

that we could and should deploy such systems now or in the near future.

Second, we need not argue about the feasibility or desirability of improving and expanding anti-theater ballistic missile deployments. The inclination to do so is widespread.

Third, we need not argue about the desirability of maintaining a robust R&D program in ballistic missile defense. No one opposes it.

The central issues remaining on our agenda relate to the focus and scale of the R&D effort and to plans, if any, for deployment of strategic defenses.

The broad objectives of the R&D program should be to guard against technological surprise, to investigate countermeasures and to pursue more effective ballistic missile defense systems.

In the area of anti-theater ballistic missile R&D, emphasis should be on evolutionary ground-based systems, focusing in the near term on upgrades to Patriot and in the longer term on THAAD, that's the Theater High Altitude Area Defense, and perhaps ERINT, Extended Range Interceptor. This exploration should include also systems employing sea-based, air-based and space-based complements.

A parenthetical here. As someone who is trained as an engineer and has switched to public policy I confess to an engineer's intuitive assessment that space-based interceptors such as Brilliant Pebbles would be less effective than their earth-based counterparts in defending against ballistic missiles of short and medium range. The burden of proof should fall on those who make the counter-intuitive technical claim.

Strategic defense R&D should have two main thrusts. First, development of defensive systems, probably ground based, to protect the United States against small attacks of the kind that might be launched inadvertently or without authorization or by a nation having only a small arsenal of long-range ballistic missiles. A second thrust for R&D should be exploration of advanced BMD technologies offering potential for meaningful damage limitation against large attacks. The latter effort, toward meaningful damage limitation, calls for clarification and perhaps modification of the ABM Treaty to ensure the tests of components other than fixed ground-based ones are consistent with our nation's legal obligations.

As to the scale of the BMD R&D effort, I believe that funding on the order of \$4 billion annually would be sufficient and appropriate to meet all of the needs of a properly structured program, including all strategic and theater ballistic missile defense programs.

The leap from R&D to deployment of strategic defenses is a long one and it raises some fundamental questions. Would the defensive system effectively protect the United States against even a small number of nuclear, biological or chemical weapons especially in light of the many means, other than ballistic missiles, by which such weapons could be delivered?

Should coverage be provided only to the 48 contiguous States of the United States? To all 50 States? To some, or all, of U.S. allies and friends, or globally? Where should it be based? Would it be affordable and worth the opportunity cost? That is, would it contribute more to our national well-being than would other capabilities

that could be acquired with the same resources? Would it require modification or abrogation of the ABM Treaty? If so, would it appear to be worth the military, economic and political costs of such action?

Our Nation has not yet addressed these questions adequately as they relate to the strategic defense systems currently envisaged, including the GPALS system now favored by SDIO. Until we do so, any plans for deployment of strategic systems would be premature.

Let us hope that the next phase of the American debate about strategic defenses will focus on these fundamental questions rather than on the contentious ideological issues to which previous discourse too often has been diverted.

Thank you, Mr. Chairman.

PREPARED STATEMENT OF ALBERT CARNESALE

Thank you for inviting me to express my views on the implications of the Patriot missile system's success in Operation Desert Storm for the Strategic Defense Initiative.

Three questions provide the structure of my remarks. First, what has changed in the world of ballistic missile defense (BMD) since the mid-1980s heyday of the SDI? Second, how have these changes affected the arguments for and against BMD? And third, what are the implications for the future of SDI?

Changes in the World of BMD

I begin by identifying six important changes that have occurred in the world of BMD.

Patriot's Performance. First and probably foremost among these changes is the political push given to all forms of BMD by the perceived success of the Patriot missile system in the Persian Gulf War. My use of the term "perceived success" is intended to reflect the fact that we do not yet know the extent to which the Patriot system actually reduced the damage that would otherwise have been inflicted by Scud attacks. Despite this ignorance, however, the widespread perception is that Patriot was very effective. Dramatic television coverage of the Patriot versus Scud duels heightened public awareness of the threat posed by ballistic

missiles, and led many to believe that BMD constitutes an effective response to that threat. As a result, the Gulf War has given a political boost to the SDI.

There is more than a touch of irony in Patriot's being a source of revitalized interest in the SDI. Patriot predates the SDI by well more than a decade. It was the promise of Patriot's development predecessor, SAM-D, that provided the incentive for the United States to confine the limitations of the 1972 ABM Treaty to systems for defense against strategic ballistic missiles; that is, to screen from treaty constraints systems for defense against theater ballistic missiles (TBMs). When the Strategic Defense Initiative Organization (SDIO) was created more than a decade after the Treaty was ratified, the Patriot and other anti-TBM (ATBM) systems intentionally were excluded from SDIO jurisdiction. The intention was to maintain a clear distinction between ATBM systems and strategic defense, and thereby to reinforce the immunity of ATBM systems to ABM Treaty constraints. In short, Patriot has been about as far removed from the SDI as any American system for defense against ballistic missiles could be. Unsurprisingly, ever since the Gulf War SDI advocates have been taking credit for Patriot's perceived success, giving the impression that it has always been there, and trying to package SDI projects as follow-ons to Patriot. We know better, but that won't change the tight psychological and political linkage between Patriot and SDI.

The Soviet Threat. The second major change in the world of BMD has been the recession of the military threat posed by the Soviet Union. While the Soviets still maintain a strategic offensive arsenal far more than sufficient to inflict mortal damage on the United States, the

likelihood of Soviet actions leading to such a disaster has decreased markedly. Moreover, the Soviet economy is in ruins; the Soviet government is preoccupied with domestic problems; the Soviet Union's ability to project conventional force beyond its borders continues to decline; and the Warsaw Pact is dead. Accordingly, there is less need than before to enhance strategic deterrence by deploying defenses intended to complicate a Soviet first strike. Indeed, to the extent that some thought it necessary to deploy strategic defenses to deal with half of the Soviets' force of 308 SS-18 heavy ICBMs, the START agreement, if and when implemented, will accomplish that feat perfectly and at near-zero cost.

Mission. The third change is in the mission to be performed by strategic defenses. No longer is serious consideration given to meeting the extraordinarily demanding goal of transcending deterrence; that is, to replacing offensive deterrence by perfect or near-perfect defenses. Nor does there seem to be much attention paid to enhancing deterrence by blunting a disarming first strike, or to limiting damage if deterrence of the Soviet Union should fail. Rather, the current focus of SDIO is on the far less demanding mission of protecting against limited strikes. A limited strike is an attack consisting of no more than a hundred reentry vehicles, which corresponds to about two percent of the reentry vehicles permitted in the Soviet strategic arsenal under the START agreement. This modest goal is a far cry from the "defense dominance" aspirations of yesteryear.

Technology. Fourth among the changes is a move from defensive systems based on optimistic expectations of scientific breakthroughs to systems based on technologies in hand, within our grasp, or at least dimly

in sight. Gone are the grossly exaggerated claims about near-term applications of X-ray lasers or chemical lasers in space, free electron lasers on the ground reflecting their beams off multiple orbiting mirrors, and neutral particle beams discriminating easily between real reentry vehicles and the most sophisticated decoys. We're back to good old-fashioned rocket-propelled interceptor missiles, probably fired from the ground, although space enthusiasts are eager to base some of these interceptors in orbit around the Earth.

Proliferation. The fifth change in the world of BMD is the proliferation of ballistic missiles. Ballistic missiles already are incorporated in the military forces of almost twenty countries, and the number is increasing. Many of these missiles could threaten U.S. forces overseas, our allies, and our friends. Several countries can arm their missiles with nuclear, biological, or chemical (NBC) warheads, and that number also will grow. Only the Soviet Union, China, France, and the United Kingdom have the capability today to reach the United States with ballistic missiles armed with nuclear weapons. India and Israel could join the list within a decade or so, but few if any other nations are likely to do so.

Defense Resources. The sixth important change is in the domain of defense resources. Unlike the mid-1980s, when many believed (despite evidence to the contrary) that the U.S. defense budget would continue to grow indefinitely, almost everyone now expects the defense resource pie to shrink in the years ahead. Any significant increase in funding for SDI would require a compensating sacrifice elsewhere in the Department of Defense. The competition for defense dollars is more intense than before, and is likely to become even more so.

Effects on the BMD Debate

Let me now turn to the second question that structures my remarks: How have these six changes in the world of BMD affected arguments on both sides of the debate? Consider each of the changes in turn.

First, the perceived success of the Patriot in Operation Desert Storm undoubtedly enhances the political appeal of the SDI.

The second change -- recession of the Soviet threat -- cuts both ways. On the one hand, a collapsing Soviet economy and a less aggressive Soviet Union mitigate U.S. concerns about the prospects for, and potential consequences of, any significant expansion of Soviet defenses. For this reason, modification of the ABM Treaty to permit more extensive strategic defense in the Soviet Union as well as in the United States appears less risky than before. On the other hand, the reduced likelihood of a Soviet first strike against U.S. strategic forces surely lessens any felt need to deploy defenses intended to blunt it, and potential deep reductions in offensive arsenals would heighten our concerns about penetrating Soviet defenses.

The third and fourth changes -- retreating from President Reagan's SDI vision of "eliminating the threat posed by strategic nuclear missiles" to the Bush administration's far more modest goal of providing protection against limited strikes, and shifting the focus from BMD systems based on unforeseeable scientific discoveries to systems relying more on plausible technological advances -- together raise the SDI debate to a level of realism far higher than that of earlier years.

There is no doubt that the fifth change -- the accelerated proliferation of theater ballistic missiles -- heightens the need to defend U.S. forces and interests within TBM range. Fortunately, there are

no indications of an imminent jump in the number of hostile parties threatening the U.S. homeland with ballistic missiles carrying nuclear weapons or other weapons of mass destruction.

Sixth, the continuing decline of the U.S. defense budget augurs ill for the SDI. Thus far, the Army has been willing to sacrifice not one tank for strategic defense; the Navy not one ship; the Air Force not one plane; and the Marine Corps not one bayonet. I see no sign of support within the Department of Defense for a reallocation of resources of the kind required to facilitate extensive deployment of strategic defenses.

Taking into account all of these considerations, I conclude that the changes in the world of BMD bolster the already strong case for improving and expanding deployments of defenses against theater ballistic missiles. Their effect on the case for moving toward widespread deployment of strategic defenses also is favorable, but is not decisive. The strategic defense debate will continue.

Implications for the SDI

I now turn to the third and final question that structures my remarks: What are the implications of all this for the future of the SDI?

It is worth trying to set aside a few issues that need not appear on the agenda for the BMD debate. First, we need not argue now about the feasibility or desirability of deploying strategic defenses to transcend deterrence, to enhance deterrence, or to limit damage against a large scale attack of the kind that could be mounted by the Soviet Union. Few maintain that we could and should deploy such systems now or in the near future. Second, we need not argue about the feasibility or desirability of improving and expanding ATBM deployments. The inclination to do so is widespread. Third, we need not argue about the desirability of

maintaining a robust research and development program in BMD. No one opposes it.

The central issues remaining on our agenda relate to the focus and scale of the R&D effort and to plans -- if any -- for deployment of strategic defenses.

The broad objectives of the R&D program should be to guard against technological surprise, to investigate countermeasures, and to pursue more effective BMD systems. In the area of ATBM R&D, emphasis should be on evolutionary ground-based systems, focusing in the near term on upgrades to Patriot and in the longer term on THAAD (Theater High Altitude Area Defense) and perhaps ERINT (Extended Range Intercept Technology). This exploration should include also systems employing sea-based, air-based, and space-based components. (With regard to space-based interceptors such as Brilliant Pebbles, however, I confess to an engineer's intuitive assessment that they would be less effective than their Earth-based counterparts in defending against ballistic missiles of short and medium range. The burden of proof should fall on those who make the counter-intuitive technical claim.)

Strategic defense R&D should have two main thrusts: first, development of defensive systems, probably ground-based, to protect the United States against small attacks of the kind that might be launched inadvertently, or without authorization, or by a nation having a small arsenal of long-range ballistic missiles; and second, exploration of advanced BMD technologies offering potential for meaningful damage limitation against large attacks. The latter effort calls for clarification and perhaps modification of the ABM Treaty to ensure that tests of components other than fixed ground-based ones are consistent with our nation's legal obligations.

As to the scale of the BMD R&D effort, I believe that funding on the order of \$4 billion annually would be sufficient and appropriate to meet the needs of a properly structured program.

The leap from R&D to deployment of strategic defenses is a long one, and it raises some fundamental questions. Would the defensive system effectively protect the United States against even a small number of NBC weapons, especially in light of the many means other than ballistic missiles by which such weapons could be delivered? Should coverage be provided only to the 48 contiguous states of the United States; to all 50 states; to some or all U.S. allies and friends; or globally? Where should it be based? Would it be affordable and worth the opportunity cost; that is, would it contribute more to our national well-being than would other capabilities that could be acquired with the same resources? Would it require modification or abrogation of the ABM Treaty and, if so, would it appear to be worth the military, economic, and political costs of such action?

Our nation has not yet addressed these questions adequately as they relate to the strategic defense systems currently envisaged, including the GPALS (Global Protection Against Limited Strikes) system now favored by SDIO. Until we do so, any plans for deployment of strategic defenses would be premature. Let us hope that the next phase of the American debate about strategic defense will focus on these fundamental questions rather than on the contentious ideological issues to which previous discourse too often has been diverted.

The CHAIRMAN. Thank you very much, and I want to thank all of the witnesses this morning for very interesting testimony.

Let me call on my colleagues to ask questions in just a moment, but first let me lay out the differences between the three witnesses on the issues.

What I hear all of you saying about Patriot strikes me as roughly consistent with one another. I will let others follow up on it. I guess you all agree that the Scud was a fairly primitive system and other systems would be much more difficult to defend against.

From a policy standpoint, I guess there are three questions, and I would just like to ask you to briefly state your positions to highlight the differences.

One is what should we do about theater ballistic missile defense? Second, what should we do about the defense of the United States? In other words, as a defense against an unauthorized or an accidental launch or a Third-World country. Third, does the present GPALS make sense? In other words, is this program, particularly the Brilliant Pebbles component, a good idea?

What is the moral of the story here from the standpoint of the theater ballistic missile defense? Are the programs heading in the right direction? Arrow and ERINT and these other programs for example.

Al.

Dr. CARNESALE. Yes. I will be happy to start, Mr. Chairman. Let me just take the three in turn.

On theater ballistic missile defense, I believe the right way, as I indicated, is evolutionary ground-based systems, which is precisely what we are doing. We have become more aware of the ballistic missile threat than we had been in the past. There are ample grounds for accelerating the ATBM program which, in the past, was a stepchild of SDIO and was viewed as a competitor rather than as an augmentation. I would like to see us accelerate those programs.

Second, with regard to defense of the United States, none of us would ever want to be in the position of opposing that in principle, and I do not oppose it in principle. I am very much in favor of it. I do not know how to do it. I have not yet seen a system that would be worth the investment it would take for the number of lives it might save against an accidental or unauthorized attack. Surely the money would be better spent on highway safety if what you are interested in doing is saving American lives.

The CHAIRMAN. So keep up the R&D but do not deploy.

Dr. CARNESALE. Keep up the R&D—indeed, I would actually accelerate it. As I indicated, you will notice my funding level was slightly higher than what SDIO has now. I would favor deploying a defense, if we could do it well. But deploying a system to do it poorly seems to me to make no sense given the competition for resources.

Finally—

The CHAIRMAN. Brilliant Pebbles.

Dr. CARNESALE. Yes. Finally, GPALS or Brilliant Pebbles. That strikes me as still very much of a research program. We have moved backwards in technology. That helps a lot. Brilliant Pebbles is not an x-ray laser or a free-electron laser or a neutral particle

beam. We know more about it. But the idea that you are going to deploy this thing in space, which will be further by far from the apogee of any missile we are interested in intercepting rather than from the ground, strikes me, and most of the other technical people I have talked to, as rather odd, and it would be surprising if it were more effective than ground-based systems or nearly as effective.

While I am open to evidence to the contrary, I certainly have not seen it.

The CHAIRMAN. Thank you. Before we leave you and go to Dr. Postol, let's go to the second question, the defense of the United States against accidental launch, unauthorized launch, or a future possible launch of a ballistic missile attack. Not possible now, but one that might be possible in the future by some Third-World country. You do not see anything right now that is worth deploying?

Dr. CARNESALE. That is correct. I do not see anything right now that is worth the defense resources. I am not opposed to this as a matter of principle. I simply think there are better ways to spend the money at this time.

The CHAIRMAN. Dr. Postol, what do you agree or disagree about what Al Carnesale says?

Dr. POSTOL. Not much, but I have some things to add.

The CHAIRMAN. OK.

Dr. POSTOL. On the question of what we should think about for the theater ballistic missile defense, I think we should consider upgrades to Patriot because upgrades to Patriot in some sense give us some utility in other areas, for example, air defense. Some of the upgrades that you think about are for example, increasing the power of the radar. Well, even if it does not do a great job as an anti-missile defense, a more powerful radar is going to make the capability of Patriot as an air defense even greater. That cannot be a bad thing.

Another possibility is high-altitude intercepts to make intercepts at longer range. Now, there I think again there is no question that one can intercept vehicles like Scuds at high altitude. We should understand what we get for that attempt and what we do not get.

If these Scuds were accompanied with the simplest of countermeasures, we could almost certainly not do the high-altitude intercept. Now, the question, of course, is who are we building these defenses for? If we are dealing with Third-World states that do not have their own technological base, and cannot deploy countermeasures, Iraq was, of course, an example of that, then I do not think there is any problem. A high-altitude component added to the Patriot would be quite effective.

However, we have to consider the possibility that those states which sell things like Scuds to other states may also sell countermeasures to them simply because if you are selling a product you have to improve the product to sell it to somebody. If your objective is to create terror with these weapons, then the purchaser may want these countermeasures.

Again, as long as we understand what we are getting and what we are not getting, then, of course, the Congress has to decide.

The CHAIRMAN. OK. So you would improve the Patriot. Would you buy Arrow? What else would you do in the area of theater defense?

Dr. POSTOL. Buying the Arrow is problematic. I do not know the answer to your question, but let me explain to you why I regard it as problematic.

The Arrow has a front-end homing interceptor on it that will put in the hands of Israel and anybody else who we transfer technology of this type to a low-altitude satellite capability.

I just do not know—I do not have a position on this—I have not thought this through deeply enough, but I think we really want to think about whether we want this kind of technology to begin to propagate around.

I cannot answer your question, but—

The CHAIRMAN. Do you know on any of the other systems, ERINT, THAAD, what else have we got there?

Dr. POSTOL. They are all, in my judgment, and I think I can claim some technical expertise here, they are all variations of the same thing.

The CHAIRMAN. So they all have the same problem?

Dr. POSTOL. Well, yes, to a first approximation.

The CHAIRMAN. So your position basically is to improve the Patriot for sure. The rest you have some question about.

Dr. POSTOL. Well, it is not my position. It is just that you asked me what are things that you—you are the guy with the decision-making—

The CHAIRMAN. Yes, but you are the guy giving us some advice here.

Dr. POSTOL. That is just my technical advice, right.

The CHAIRMAN. All right. Now, on the issue of the defenses of the United States, I take it that you and Al Carnesale are two peas in a pod here. Or maybe you are not. Al would do research but not deploy. He sees nothing worth deploying and he is not, at this point, in favor of Brilliant Pebbles.

Dr. POSTOL. Well, first of all, I want to make it very clear. I am a big advocate for SDI research and I always have been. My problem is the nature of the current program. In other words, as a technologist who is concerned about providing for the defense of the country, I do not see spending money on strapped-down chicken experiments as being in the interest of the country for demonstrating strategic defenses.

I think there are good reasons why we should be very actively involved in strategic defense research. For example, we would like to know if somebody is going to deploy a strategic defense, what the technology could look like so that we could defeat that defense. If you do not know anything about the technology, you have no hope of defeating it.

Now, if you do, if you have a sensible serious program that has technical integrity, and you go about doing this kind of work, maybe at some time you will actually find technologies that are too difficult to defeat. I do not expect that, to be quite frank. But I am agnostic about this and I think it is a good thing to be doing. So I have no problem with research.

The CHAIRMAN. Thank you.

Richard, I take it that from your statement that you have some disagreement with what they would advocate.

Mr. PERLE. I do, I do indeed. In particular I am puzzled as to why Professor Postol wants to do research when he rather derisively dismissed the notion that a defense could ever prevail over the cheap and easy decoys and countermeasures of the offense. I think he takes the view that I have been hearing for 25 years, which is that it is always easy to defeat the defense—defense will never prevail technically over the offense. I think that is probably wrong.

But, in any case, it will end up limiting the SDI program to the laboratory which is generally just fine with scientists, but does not necessarily provide much of a defense.

I think we want to be clear about one point that has been lost in the discussion so far. The Patriot missile was never intended to defend broad population areas. It was intended to defend military targets, in the first instance to knock down aircraft, but has improved in the 1980s to defend military targets.

Had it been used for that purpose, I think the results were really quite spectacular in terms of the number of intercepts that were made and at high accuracy that was required to strike hardened targets. There is good reason to believe that most of the Scuds would have failed to achieve their military purpose. Or to put it the other way, Patriot would have succeeded brilliantly. Obviously the debris did a great deal of damage in civilian areas.

So we should not limit the horizon. There is a great deal that can be done with defenses to improve their capability for the defense of non-military targets. While it is true that Scud is a primitive missile, Patriot in a sense is a primitive response to that, and for the purposes of defending populations, it was never even intended for that purpose.

With respect to theater—

The CHAIRMAN. On the theater and on the defense of the United States, you have already stated your position, but say it again.

Mr. PERLE. Because we ought to get on with the job of defense.

The CHAIRMAN. On the Brilliant Pebbles?

Mr. PERLE. The Brilliant Pebbles technology seems to me extremely promising, and I would push it and I would push it quickly.

There is one element missing in the program as you outlined it by implication in your question. In addition to improving our capability to intercept theater ballistic missiles, we ought to do a better job of controlling the export of technologies that permit countries to acquire ballistic missiles.

The CHAIRMAN. Fair point.

Mr. PERLE. Dollar for dollar, the cheapest possible way to defend against them. We have done precious little in that regard.

The CHAIRMAN. But basically you would go ahead with the theater programs, Arrow, THAAD, ERINT, Patriot. You would also advocate a fairly early deployment, I take it, of some kind of a defense of the United States?

Mr. PERLE. No, not necessarily an early deployment.

The CHAIRMAN. OK.

Mr. PERLE. It seems to me the most important hurdle to get over in the eventually effective deployment to the strategic defense is an intellectual and a policy one. If the Congress were to say to the SDIO, "Get on with the job. We are serious about defending Amer-

ica against ballistic missile attack," you do not have to tie yourself in technical knots to get around the arguments of the Cold War period, which I think we continue to do. "Get on with it and come to us with some sensible approaches that assume you can do whatever it makes sense to do militarily. Tell us how you would deal with obstacles like treaty interpretations and the like." Then I think you would get a much more coherent, and in the end, a more effective program.

The CHAIRMAN. Bill Dickinson.

Mr. DICKINSON. Thank you, Mr. Chairman. I am not going to take much time. I would rather yield my time to Jon Kyl and a couple of other experts on this side.

But I did want to ask Dr. Postol, if I might, about a couple of statements that he made.

Doctor, you said that your studies have led you to believe that the damage received by Israel was twice as much after we started intercepts as it was before. Did I understand you correctly there?

Dr. POSTOL. May I expand on that for a bit?

Mr. DICKINSON. I wish you would because it was a surprise to me.

Dr. POSTOL. First of all, these are—

Mr. DICKINSON. I take it that you would rather see them go on and—

Dr. POSTOL. I am sorry?

Mr. DICKINSON. I take it that you would rather see them go on and impact and explode then be shot in the air and have the debris fall.

Dr. POSTOL. The purpose of the defense is not necessarily to make intercepts. It is to reduce the levels of damage. That is the objective of the defense.

Mr. DICKINSON. I do not see how they are separated.

Dr. POSTOL. Well, what occurred—first of all, we do not really know what occurred on the ground at this time. If you look at my testimony I think you will see that I am careful to call it speculations based on public data that have been provided by sources in the newspaper, basically summaries and detailed discussions that I have obtained from Israel.

So it is very hard to know exactly what these damage reports mean. If you look at the damage reports, what you find is that the number of apartments damaged per Scud attack after Patriot defense began roughly tripled relative to before Patriot defense began.

Now, let me clarify why this could be deceptive. I am not suggesting that a tripling factor is necessarily correct.

For example, a lot of these apartments that were damaged were damaged very moderately by small pieces of Scuds and Patriots falling to the ground rather than massively. It could then appear that there was more damage because each apartment that has a broken window gets compared to an apartment that has been completely demolished. So I am not claiming that the net level of damage on the ground tripled. I am saying that the data as it is now available suggests that there may have been an increase in damage per Scud attack during the period of defense.

Now, how could that occur?

Mr. DICKINSON. Yes, because that is very misleading to me.

Dr. POSTOL. I am sorry?

Mr. DICKINSON. The original statement is very misleading and so if you could amplify and explain it to me.

Dr. POSTOL. Oh, sure. I am sorry if it had that effect.

Mr. DICKINSON. Broken windows and—

Dr. POSTOL. Well, I do not know that. I am just saying that until I see more of the data, I cannot assert anything for sure. I have been through 10 hours of meetings with people from Raytheon and they have been unable to provide any data on this, which is interesting.

Mr. DICKINSON. Go ahead.

Dr. POSTOL. There are three outcomes that could occur during an engagement of a Scud missile. One outcome is the Patriot interceptor hits the Scud missile close enough that it either completely destroys the missile or it sets the warhead of a Scud missile off which would completely destroy the Scud. That is the most decisive outcome of a defense engagement. Of course, the best outcome.

Now, in that situation, you are going to have many small pieces of Scud missile and Patriot coming to the ground. That is probably going to cause widespread but relatively light damage. That is one type of intercept.

The second type of intercept is where a Patriot interceptor hits a piece of Scud and cuts it into large pieces. That also is an outcome that we know has occurred. In fact, the sequence of pictures I gave you shows a Lance being cut in two. Now, in a situation like that, one should keep in mind that the destructive energy in the Scud missile, if it had no warhead, is roughly equal to half its weight in TNT. This thing is moving very fast when it hits the ground. So if you break it up into several pieces and they are big pieces, each one of them is going to have the effect of an independent Scud when it hits a structure, because it is going to completely destroy a structure.

So in a situation like that, where the interceptor cuts a Scud into more pieces, you may in fact have more pieces falling to the ground and more damage.

A third situation, which was reported in the news, is when the Patriot interceptors pick up a piece of falling Scud and start homing on it, and they dive into the ground, which was observed. We do not know how many times this occurred. When one of these interceptors dives into the ground, it could well be going faster than a Scud missile. Its empty weight is about 1000 pounds. So it is about four or five times lighter than a Scud. But it has got a lot of kinetic energy in it and it has a warhead that is probably comparable in its destructive power to the Scud although it is lighter.

So given all these things happening—again, we do not know in detail, it is not out of the question that the levels of damage were increased.

Mr. DICKINSON. Well, I thank you for the clarification I think, but let me make sure that I understand you.

You say it is possible that more damage was inflicted than if we had not intercepted and let them explode on impact, wherever they were aimed.

Dr. POSTOL. Well, I understand that is an upsetting conclusion, but it is possible, yes.

Mr. DICKINSON. Well, it is possible. All right.

Dr. POSTOL. Maybe if we get some of this information declassified it would be interesting.

Mr. DICKINSON. All right. I was also surprised in your statement as to the nature of the experiments that I think you find unsatisfactory at least in the SDI program, and none of us want to create just a jobs program. We have spent great amounts of money in trying to develop the SDI program. Are there any particular areas that you are familiar with that you think are wasteful, where we are just wasting money—we are just creating jobs? Is there anything you can point to that we should probably eliminate or change directions or whatever?

Dr. POSTOL. Well, I guess if I may turn the question around, and please probe me again if you are not satisfied with my answer, I have actually been troubled by a part of what I have perceived in the SDI program of what I would call a lack of serious and coherent activity in countermeasure research. That is to say, when the SDI program has a particular technology that they are trying to develop, I have noticed that there tends to be a reduction in funding for people who are doing the red team side of the activity. That strikes me as not in the national interest.

So I guess my concern is not so much that we are spending money on some of these technologies. I do not have a problem with spending money on some of these technologies. I do have a problem with a program that skews the funding so that we do not have what I would call a complete picture of what the measures and countermeasures look like.

So that is really my problem with the program.

Mr. DICKINSON. One final question if I may, Mr. Chairman, and I do not want to monopolize.

Dr. Carnesale gave the opinion that about a \$4 million R&D effort was what he thought would be adequate, which I take to mean that less than that would not be adequate. I do not know if he intended that.

But we have been attempting to fund it at about this level now for several years. It has been receiving rather dramatic cuts. I do not know what the budget request for SDI this year is—I think it is \$4.3 billion.

What is your opinion about the funding level, Dr. Postol?

Dr. POSTOL. Well, the number I gave, \$4 billion—

Mr. DICKINSON. Well, let him correct it if I misunderstood him. I would like your opinion too.

The CHAIRMAN. That \$4 billion, did that include the DOE part or are you advocating \$4 billion—

Dr. CARNESALE. I am talking about a total of \$4 billion. The number I used was \$4 billion. First of all, I modified it with “on the order of” —

Mr. DICKINSON. Yes.

Dr. CARNESALE. I was using “on the order of \$4 billion” as opposed to \$3 billion or \$5 billion. It was not intended to be precise. It is more than we now spend, and that is because of two things. First, more of the theater defense activity now falls under the rubric of SDI, and I intend to include that theater defense activity. Second, I would like to see the theater defense activity expanded

beyond what is included in the current SDI base of \$2.9 billion. The SDIC request for next year is something like \$5.2 billion, as I recall. I was saying that \$2.9 billion does not sound like enough and \$5.2 billion sounds like it is more than is needed. The \$4 billion seems to be about the right number. It should be more than it now is, but not the \$5.2 billion that has been requested.

Mr. DICKINSON. Dr. Postol, where do you disagree with the numbers?

Dr. POSTOL. Well, I have to admit to you I do not have an informed judgment of how we should spend this money and how much we should spend.

Let me say though that if the countermeasure research that I have raised a question about were to be more adequately funded, we would be doing flight testing of objects to understand whether they work or not or how well they work and to understand their characteristics.

Flight testing is a very expensive activity. So I cannot rule out that—because you are not only flight testing—it costs you missiles. You have to have instrumentation out there. You have to really collect data. So I do not rule out that you would have a substantial program that could be in line with the numbers we have heard. But quite honestly—I cannot give you a number but I have not gone through that arithmetic.

Mr. DICKINSON. Well, thank you, because there is important to us. We debate this every year and, of course, many, many of the efforts to reduce the funding are really just thinly disguised efforts to kill it. Not a serious attempt to go forward with the program.

Dr. POSTOL. But I want to underscore, sir. My concern is not the funding level so much as how we are spending it.

The CHAIRMAN. Beverly Byron.

Mrs. BYRON. Thank you, Mr. Chairman.

Let me say that I happened to have an opportunity to meet with the Israeli Patriot battery group, the joint group, and I got a fairly in-depth briefing from them on their mission and the pride that they showed. We now are looking at lessons learned today.

Dr. Postol, I looked at your series of photographs and as we all are aware that the Iraqis extended their Scud missiles in size which led to a destabilization of a missile system. When we saw incoming missiles, it was not just one missile. There were several segments of that missile because it had broken up in the atmosphere in some cases.

Missiles were incoming at population areas. I do not know how we defend against a population area because I think many years ago somebody says, "What goes up will come down." So we will always find that if there is something in the air, it is going to—unless it disintegrates—come down, and in a population area, you have a serious problem.

How do we defend against the fact that the warhead was not always the part that was hit by the Patriot battery? How do we defend against a missile segment that for one reason or another is going to break up in altitude? Also, since you probably have a fairly in-depth understanding of the issues in Israel versus in Saudi Arabia, did you see any difference between the capability of those incoming missiles, whether they were over-populated areas or over

desert areas, the weapons systems' operational capability and in the variety of Patriot batteries that were—

Dr. POSTOL. Yes. First of all, I think you can defend against these ballistic missiles if you intercept them at higher altitudes. Especially if you use what are called hit-to-kill systems, systems that have optical homing, sometimes called infrared homing. But the are basically optical homing systems.

If you intercept the missile at higher altitudes, you are going to completely demolish this missile and, in fact, you are going to make it into very small pieces which are going to slow up in the upper atmosphere and fall well short of the target area, even if that target area is quite a large urban area.

Again, I have no problem that you can do that. I just think that if we decide that we want to do that, we should just be aware of the fact or the possibility that such an approach is very susceptible to countermeasures on the part of an adversary which may or may not be present. I just cannot be sure of that.

As far as Israel versus Saudi Arabia, I agree with Mr. Perle that defending against what is called a hard target versus an area target, an area target being a big area like Tel Aviv, is a far easier task. I have no disagreement with that at all.

In Saudi Arabia these areas that were being defended were not enormously spread out urban areas like the Tel Aviv area was. So it appears—again, the data is very sparse at this time. It appears that in some cases, the missiles fell outside the areas and caused less damage than you might otherwise expect.

Now, of course, if there was a built up area around these smaller areas, then, of course, the damage might have been the same or even larger. So it appears, and I want to underscore—I do not know at this time—that the damage was lighter in the Saudi Arabia theater simply because of that effect.

Mrs. BYRON. You have already testified that you are in favor of planned improvements to the system. I believe in answer to—

Dr. POSTOL. I am not a decisionmaker. I am here to try to help people make decisions. I am not—

Mrs. BYRON. In your estimate an improvement to the system would be beneficial?

Dr. POSTOL. Well, I think there are benefits that we get even if it does not improve the anti-missile defense capabilities.

Mrs. BYRON. Psychological benefits?

Dr. POSTOL. No. The air defense capabilities of the—the Patriot is basically an air defense. That is to say, it is something that is built to shoot at airplanes. The air defense environment can be a very intense countermeasure environment. Airplanes can carry jamming devices, all kinds of decoys of their own. Some of the improvements—for example, increasing the power of the radar—would actually enhance the Patriot as an air defense system. It would only, quite frankly, moderately increase the capability of its missile defense function because it is going to have very limited missile defense capability under the most optimistic of conditions.

So I am just pointing out that if you feel you have to spend some money or you want to spend some money on upgrades, you do in fact get a benefit that could be of military utility.

I am not advocating this. I am just—this is the upside, the downside of it.

Mrs. BYRON. Mr Perle, could you comment on the planned improvements from your prospective?

Mr. PERLE. Yes. My impression is that a great deal could be achieved with planned improvements. Improvements in performance that are significant, but indeed by orders of magnitude. So I do not agree that only modest improvements are achievable.

The Patriot is a first attempt and it is extraordinary in that light how successful it has been. Given what it was intended to do, and given the modest amount of money that was put into developing a system originally intended for another purpose, it was a spectacular success, and I believe that we can go on by improving it. By pursuing the related technologies and achieving formidable ballistic missile defenses.

I simply do not share the Professor's technological pessimism.

Mrs. BYRON. Dr. Carnesale.

Dr. CARNESALE. Yes. I do favor the improvements. I think it might also be worthwhile to refer back to when the Chairman opened the hearing, mentioning that some had claimed that the Patriot system somehow had been impeded or retarded by the ABM Treaty.

In this context, I would maintain—as one who was involved in negotiating the ABM Treaty—that the treaty was carefully designed not to impede Patriot. From what I know, none of the planned improvements to Patriot would violate the ABM Treaty. The Patriot is unambiguously a defense against theater ballistic missiles. I favor the improvements.

It is also worth pointing out that they are designed not simply to make Patriot the best anti-theater ballistic missile system it can be, but to do that within the constraint of not suffering any loss in air defense capability. The Army thinks of Patriot first and foremost as an air defense system, and my understanding of the improvements are that they will boost its ATBM capability without sacrificing air defense capability.

The CHAIRMAN. Yes.

Dr. POSTOL. If you look at my testimony, if you turn to Figure 7 in my Appendix, I show the altitude at which a Scud might be if you had to launch a Patriot interceptor at that Scud.

Basically what that shows, if you walk through the diagram, is that the Patriot interceptor has to be launched when the Scud is basically in a very low density atmosphere, so it is not being influenced much by aerodynamic drag.

Now, if you turn to Figure 10, you will see an electronic decoy that has currently been experimented with by the Navy, but this is not a high technology device.

What this decoy would do would follow along with the Scud missile, for example. It might weigh a few pounds and it could be deployed along with the Scuds.

So now, again I am not suggesting this countermeasure is what you will see. I do not know what countermeasure you will see, but this is not a high tech countermeasure.

So if you spend money upgrading the Patriot and you improve its air defense capabilities, so be it. But I think it is not well grounded

to argue that one is optimistic about what would happen if you upgraded this system and tried to defeat missiles with their countermeasures. We have looked at this problem in great detail at MIT and we ought to understand that if there are no countermeasures, the system can work.

Mrs. BYRON. Systems are breaking up in this scenario on its own.

Dr. POSTOL. It was a pretty effective countermeasure although unintended, yes.

Dr. CARNESALE. If I could, Mr. Chairman, could I add a word?

The CHAIRMAN. Yes.

Dr. CARNESALE. It is important for us to distinguish between the kind of theater ballistic missile threat that might be mounted by a Third World country and might be mounted by the Soviet Union.

Flying them at depressed trajectories, less than the most efficient trajectory, is something that a Third World country would be able to do, but they probably could not do much more for awhile. What we are talking about here is a theater threat, and when we talk about accidental, unauthorized or third party threats, they are first and foremost threats to our allies and friends and to our forces.

The only nations that have intercontinental ballistic missiles that could reach us with weapons of mass destruction on them are the Soviet Union, China, Great Britain and France.

What we have been discussing here is really theater defenses. Unauthorized use and third party use may be real threats to our forces. It would be a mistake to confuse that with the need to defend the United States against such threats with defending our forces against such threats and perhaps our allies and other interests around the world. They are within range of these shorter range missiles.

The CHAIRMAN. Norm Sisisky.

Mr. SISISKY. Mr. Chairman, I think this is a very interesting debate.

It intrigues me that most of the debate on SDI has gone to theater ballistic missiles which I believe the Department of Defense actually wanted to happen.

It is a strange phenomenon. We have learned something, true, but if you remember the budget for this year is over \$5 billion for SDI, \$1 billion of it for the theater ballistic missiles, we are talking about only \$1 billion of a \$5 billion program.

Mr. Perle, I really enjoyed reading your statement and I remember something you said in front of one of our subcommittees a couple years ago about burdensharing. It was a very good idea and we used it and I think we used it well.

Back in February, I asked the Secretary of Defense why our allies could not share the cost of developing and deploying tactical and theater ballistic missiles, considering that they are going to benefit from the development, as we have already seen.

For example, if you would have offered Saudi Arabia a way to save themselves from Scud missiles, there is no telling what they would have paid for that technology or Israel.

I received a letter from the Office of the Secretary of Defense outlining the amounts governments are paying. I would hate to tell you in public what they said they are paying. It's a strange phenomenon.

It would seem to me that there is an opportunity here. Somebody in their statement said they have not seen the Navy giving up a ship or the Air Force giving up a plane. They do not have anything to give up from what is happening, and therein lies our problem of spending \$5 billion.

Do you see a possibility of the unique opportunity of burdensharing with our allies? After all they are going to benefit. There is no question that the proliferation of missiles—I understand by the year 2000, there will be 15 nations that will have ballistic missiles, so I would like your comment on that, if you will.

Mr. PERLE. Well, I do not think we will get very far by simply asking them to contribute.

One way to elicit a contribution would be to try to recover the development costs more fully when systems are subsequently sold to other nations. We ought to mark them up a little bit. I do not see why we should sell them at cost. We do not take a very businesslike approach to these exports.

Mr. SISISKY. I agree with you.

Mr. PERLE. Frequently the purchasers pay a tiny share of the research and development costs and often those charges are not collected.

We ought to take a look at ways in which we could recover commercially from the sale of these systems.

Mr. SISISKY. Thank you, Mr. Chairman.

The CHAIRMAN. John Spratt.

Mr. SPRATT. Thank you, Mr. Chairman. I appreciate the testimony of all of you.

You made the point, Mr. Perle, that strategic defenses could be more stabilizing than a world based on deterrents with mutually assured destruction.

We had Glenn Kent testify here a couple years ago and he would agree with that end result, but he also pointed up the fact that getting from here to there is a period of instability, a problematical period, particularly if each of the adversaries is pursuing a somewhat different course.

Particularly, if we were to deploy GPALS with Brilliant Pebbles, what do you think the response of the Soviet Union would be if they didn't have some system of their own to deploy in response?

Mr. PERLE. I do not think there would be any significant response or any that we need be concerned about.

In my view, what has made the notions about abandoning or restricting the effort to get a defense because of its effect on the Soviets archaic, is the collapse of the Soviet Union as a military power, at least the collapse of the Warsaw Pact.

Mr. SPRATT. You state in your testimony that they are investing massively in strategic defenses themselves and one of the outgrowths is antisatellite systems, which is the other side of this particular coin. You develop some very effective antisatellite systems, and they are very effective therefore against our space-based systems.

Mr. PERLE. Well some space-based systems will be more vulnerable than others. I would not favor putting into space systems that are so vulnerable that they can't be effective.

But I do believe that the Soviet ability to keep pace with SDI is limited. They believe that too, and I think that is evident in the way they reacted to SDI when it was first proposed in 1983. Moreover, their capacity today is, in many ways, less than it was then because technology is moving very rapidly and their ability to keep up with it, if anything, is declining.

So I don't think we need to be concerned about the Soviet reaction, I really don't. I don't see what they could do that would make it significantly less secure compared to the benefits that we would achieve even if we had a limited defense.

Mr. SPRATT. Let me ask Dr. Carnesale—

The CHAIRMAN. Would the gentleman yield a second?

Are you going to ask the rest of them the same question?

Mr. SPRATT. Yes.

The CHAIRMAN. Let me add to the question a little bit. I find that, at least from the arguments that the Pentagon often makes, the argument is that they will or will not be able to do the technological improvement depending upon the argument that they are trying to propose. Let me just explain.

Richard, for example, the Pentagon would agree with you that we could go ahead with defense because it is unlikely that they would do the countermeasures to overcome them.

But when it comes to the question of building the B-2, Pentagon officials say the Soviets are going to continue to spend \$10 billion a year for the next decade to make sure their air defenses are better so we have to buy the B-2.

So it depends upon what they want to do and then they factor the Soviet response into it. So what you get is the impression that the Pentagon is arguing either the Soviets are or are not going to continue with technology based upon what they want to do.

Mr. PERLE. It is partly, there is no question that, as long as I can remember anyway, arguments of convenience have been made on all sides of this debate and will continue to be made, and I think I have even heard some this morning.

But I do believe, Mr. Chairman, that when you get to the kinds of sophisticated systems of which we are now capable and you look at the condition the Soviet Union is in today, which is on the verge of dissolution and bankruptcy, their capacity to keep pace with that rapidly moving technology, I think, is likely to prove quite limited.

Moreover, if we are embarking upon a limited defense, the motivation is not there. It is not as though we would be attempting to cancel their deterrent capability by deploying something so formidable that if we succeeded they would essentially be reduced to strategic inferiority.

So they can tolerate and have every reason to acquiesce in a modest defense initiative.

The CHAIRMAN. Except it may not be obvious to them that this is only going to be a limited system.

Mr. PERLE. Well, we could make it obvious to them if we tell them. There is a greater receptivity to this sort of argument—

The CHAIRMAN. Would you carry that argument? I do not know where you are on the B-2 these days, Richard, but would you also then carry the argument to saying that you don't think that the

Soviets will improve their air defenses—that's a formidable task, too, over the next decade—and make the B-1 and our current bomber fleet susceptible to air defenses?

Mr. PERLE. Well, what I like about the B-2 is the notion that with the B-2, the United States could reach a target virtually anywhere in the world with little chance that the aircraft would be intercepted. I think that is an important capability.

The size of the buy should reflect the utility of the B-2 in a lot of situations other than a central strategic war with the Soviet Union.

The CHAIRMAN. Give me your prognostication of improvement in Soviet air defenses.

Mr. PERLE. I can't give you a technically competent judgment on that.

The CHAIRMAN. No, but you just gave us a judgment on whether they would respond to our defenses.

So the question is, would they improve, given the same stress that they have on their economy, etcetera, would they spend that kind of money in a highly technical thing on improving air defenses?

Mr. PERLE. It's the technical argument I want to shy away from. I have no doubt they will continue to maintain a large force of ground based missiles and aircraft.

The CHAIRMAN. Capable.

Mr. PERLE. How capable they will be against the B-1—

The CHAIRMAN. So why would they try and do that and not try and counter our—if we deploy the defenses—if we deployed our ballistic missile defense, why wouldn't they try and counter that if they would try and counter what we are doing on the aircraft?

Mr. PERLE. Because they might well conclude, they would be indeed wise to conclude that they simply cannot manage a successful neutralization of a limited ballistic missile defense nor is it vital that they do so. They cannot do everything.

The CHAIRMAN. So why would they choose to—

Mr. PERLE. We have chosen for a very long time now not even to attempt a defense against aircraft because it seemed to us too costly and too hard, and therefore we have no continental air defense worth talking about. We abandoned it when we concluded that it was too costly.

I think the Soviets would not attempt to neutralize a limited strategic defense, provided that strategic defense was not so comprehensive as to threaten the Soviet deterrent.

So within the range of what it is feasible and affordable for us to do, they would let it go.

Mr. SPRATT. Did you agree with Dr. Postol's assessment of a Brilliant Pebbles System that, among other things, it would constitute a real threat to one's reconnaissance satellites?

Mr. PERLE. Look, I think it would be highly desirable to the United States to have the capacity, if we chose to do so, to attack and destroy Soviet satellites.

Mr. SPRATT. Well, I am not debating it from our point of view, but from theirs.

If this system has a potential of wiping out their satellite reconnaissance system, then it is a threat to them.

Mr. PERLE. Indeed—

Mr. SPRATT. Not just a threat in the event of nuclear war.

Mr. PERLE. If it had that capability, it would be a threat to them and what are they going to do about it.

Mr. SPRATT. So consequently, they have a real motivation to deploy countermeasures if we were to proceed to deploy such a system over their national territory.

Mr. PERLE. Of course the countermeasures for protecting satellites may be very different from the countermeasures for interfering with the ballistic missile defense.

Mr. SPRATT. It might be simply supervising—

Mr. PERLE. But the Soviets have a capacity to attack American satellites and I think it is undesirable that they should have a unique position in that regard.

Mr. SPRATT. Dr. Postol.

Dr. POSTOL. Well let me—if you do not mind, I will try to stick to objective technical analysis rather than arguments based on convenience, as was stated earlier, but I do not agree that it is stabilizing every time when both sides have big defenses. It may be stabilizing. I want to underscore that it may be stabilizing, but it does not follow that it will be stabilizing.

Let me just give you an example, which I do not claim is the only outcome that could happen, but it is plausible.

A plausible example of a situation where both sides have deployed strategic defenses might be a situation where both sides have deployed GPALS type systems. Let us say a Brilliant Pebbles type systems.

Now, in a situation where both sides have deployed a Brilliant Pebbles type space-based defense, the side that takes its Brilliant Pebbles defense and shoots down my Brilliant Pebbles defense, is the one who is in the position not only to defend itself, but also to attack and have leverage.

Now that is a situation where, in fact, defenses are clearly not stabilizing and I would argue that that is a classic—I mean just common sense would tell you that.

Now that does not mean there are not situations where defenses on both sides could be stabilizing. For example, since we are already in the realm of magic. Maybe I invent a shield that is relatively localized over the United States and a shield that is relatively localized over the Soviet Union, and neither of these shields can engage the other shield. In that situation, you can have a stabilizing stand off and defenses on both sides could be stabilizing.

But I think when you start looking at the technological possibilities, the way defenses work, they work by shooting at the other guy. Even in ground warfare the best way to deal with an adversary is to suppress the adversary with fire. That is the nature of modern warfare, and it is very difficult to conceive of technically realizable defenses where you have actually a stabilizing situation after both sides have deployed them.

Mr. SPRATT. Dr. Carnesale.

Dr. CARNESALE. A couple of points. First, with regard to deployment of GPALS. I think it is absurdly premature for this to be a serious debate.

One question one might ask is this: how many times have Brilliant Pebbles and GPALS been tested against a single missile, whether ICBM, SLBM or theater missile? The answer is zero times.

The idea that would make a decision anytime soon to deploy this system for \$40 billion, which is the Defense Department's low estimate, in 1988 dollars and excluding development costs and operation costs, seems to me to be rather loony.

If it turns out that the system is terrific and we learn that some time from now, then it will be time for a serious discussion.

If we can really defend the United States, you have my attention. But rather than deploy the latest in the series from Smart Rocks to Brilliant Pebbles, maybe we should wait for precocious particles that may be better. The argument is just simply premature.

With regard to the arguments about stability, you will notice that I listed six things that have changed in the world of ballistic missile defense. The list did not include the arguments about stability. They have not changed.

I have a theorem that I modestly call "Carnesale's Theorem." Weapons are dangerous and destabilizing, if and only if, they are the adversary's weapons.

You can always make the case that our system is stabilizing because we're the good guys and we would never use it in a bad way.

Everybody is prepared to agree that his system is destabilizing. You will notice that the SS-18 is destabilizing and the MX is stabilizing. You will notice that Soviet defenses are destabilizing, American defenses are stabilizing.

There is a pattern here. It is easy to figure out, and I don't think those arguments are likely to lead anywhere as long as they remain ideological.

There are some things about any weapon that are destabilizing and there are other things that are stabilizing. On balance, do you want it or not? That is the right question.

The CHAIRMAN. Jon Kyl.

Mr. KYL. Mr. Chairman, I hardly know where to start.

Let us just talk first of all about this stability. Is it more or less stabilizing, Dr. Carnesale, if only one side has a limited GPALS type capability namely the Soviets, as Dr. Perle pointed out and we do not, as opposed to both sides having it?

Dr. CARNESALE. Well first, I would argue that neither side has a limited—I don't think Richard Perle—

Mr. KYL. No. The question was postulated—I think that perhaps it was Dr. Postol that said, if both sides had a limited GPALS system and I think this was in response to Mr. Spratt's question.

My point is this: I accept part of what you say about stability, but let me talk about two things.

One, you don't have an equal system today. The Soviets have at least some ASAT capability. We do not have much of one and it seems to me that it is hard to argue that is a more stable system than if both sides had something which was equal.

Second, in the tactical side of it, is it not a fact that the limited system that was available this time was greatly stabilizing in the case of the country of Israel which then did not have to take pre-

emptive action to prevent harm to itself, but could wait and defend itself with the Patriots?

That was inherently stabilizing, was it not?

Dr. CARNESALE. If the reason why Israel did not take action was because of the Patriot, then that is certainly true, it was stabilizing.

I am not making an argument against the Patriot. But also, let me consider your ASAT case.

If I thought the Soviets had a significant ASAT capability, my first interest, in the interest of stability, would be to get rid of it, either through arms control or some other measure.

If I could not accomplish that, then I might be interested in countering it, primarily as a means to get them to get rid of it. I think the world would be better off if neither of us had ASAT capability than if both of us did. They do not now have it.

That does not mean that they technically could not shoot down any satellites. I would worry a lot if they had a significant capability.

Defenses. If they had meaningful defenses, I would worry about it a lot. My favorite world is one in which we have a lot of defenses and they have none. That's my favorite. I like that, because I believe we're the good guys.

My least favorite world is they have defenses and we do not.

I prefer a world in which neither of us has meaningful defenses to one in which we both do because I believe that defenses by and large will be more effective against a second strike than against the first strike. Therefore, they will tend to be destabilizing.

Mr. KYL. OK. That is with respect to strategic. But with with respect to theater.

Dr. CARNESALE. Same thing. I would like us to have them and them not. I can't do that, therefore I just want to make sure I am not in a world where they have them and we don't.

I am in favor of theater defenses. I would like to spend more on theater defenses. Indeed, sir, I believe that it is time that the Department of Defense started to think about the problem of proliferation of ballistic missiles and the proliferation of weapons of mass destruction.

Mr. KYL. I think we could all agree on that. Mr. Perle said it. The Chairman said it was a point well taken and I hope that the people on this capability have the ability to engage in that debate when the reauthorization of the arms control export legislation is up and other legislation is up.

Let me turn to a different question.

As I gather, Dr. Carnesale, your view is that the real threat today is theater only because only a few nations have ICBMs, but that if the technology of Brilliant Pebbles were proven and as the threat of other nations ICBMs increases then, as you said, you really have gotten my attention. The burden of proof is on those to prove that it can work.

What if it were proven that it—Brilliant Pebbles—could, in fact, work?

Dr. CARNESALE. If Brilliant Pebbles could, in fact, work and defend the United States, I would favor deploying it.

Mr. KYL. Thank you.

Mr. Perle, there are a couple of things I would like to ask you to comment on.

One, could we realistically, in your view, deploy ground based defenses to protect each thing that we want to protect around the world, is that not one of the advantages of Brilliant Pebbles?

Mr. PERLE. I do not see any reason why we should restrict ourselves to ground based systems only.

The only serious argument for doing so is that if we venture into space, we run into the ABM Treaty. I believe, for the foreseeable future, the correct interpretation of that treaty gives us the freedom we need. We should not shackle ourselves technologically with respect to a wrongly interpreted and outmoded treaty.

Mr. KYL. Let me also ask you to comment. You made the point in your testimony and then there followed an awful lot of discussion that seemed to me to indicate that your point was missed.

This whole business, Doctor, that you talked about regarding the debris falling and the fact that this was very difficult to avoid, of course, misses the point in that, as you have all acknowledged, the Patriot was a defense to protect a particular point, a weapon—a weapon system was never intended to be a civilian protection device. That in order to have that, you have got to have something with much further reach, much higher altitude and so on and your only problem with that, Dr. Postol is that maybe countermeasures could be developed or, in the case of Brilliant Pebbles, maybe it would have an antisatellite capability, both of which present problems to you. Is that a quick summary of all of that?

Dr. POSTOL. Not quite true. What I am saying is that you are the decision maker, I am not. I am not here to tell you what to think. I am just pointing out that if you believe that you should spend money on this high altitude intercept capability, which will give you the ability to defend against ballistic missiles in the absence of countermeasures, then you should spend that money with the understanding that countermeasures could likely become a problem in the future or could possibly become a problem in the future.

I do not know. It may well turn out that nobody who has these missiles will have any kind of measures at all.

On the other hand, people who sell these products, ballistic missiles to countries that are interested in using them for terrorist purposes may decide that they want to protect the value of their investment and sell them countermeasures as well.

I have no position on this. I do not know whether that will happen or not.

Mr. KYL. Let me ask Mr. Perle. Regarding the Third World threat, there has been already evidence that Third World countries are not necessarily deterred by the doctrine of mutually insured destruction.

Can you comment a little bit about the future role of a more robust real civilian protection theater ballistic defense as opposed to something designed merely to protect a defense installation?

Mr. PERLE. Yes. I believe that we ought to get on with the job of a defense against short and medium range missiles that has a reasonable chance of protecting populations.

One of the lessons of this recent war is that deterrence does not always work. Saddam Hussein was not deterred. He fired Scud mis-

siles even though Israel was in a position to deliver terrible punishment in retaliation. The whole concept of deterrence is simply not operative in this situation and I would hate to see some future situation in which deterrence is not operative, but the weapons used defensively are more formidable than these Scuds that Saddam Hussein had available.

The other lesson out of this war that is related is that Arms Control was not terribly effective either. At the end of the day, if you count for your survival on deterrence and on treaties alone and you have no capacity to defend against the threats that you know are coming, you are taking an enormous and I believe undue risk. So we ought to get on with the job.

Mr. KYL. Any response to that, other than what you have already said, Dr. Postol or Dr. Carnesale?

Dr. CARNESALE. Well just one brief one.

I would put it in two phases. First, I believe these missiles, particularly bearing chemical weapons are going to threaten our forces in important ways. It is easier to defend forces than civilians and we ought to be thinking about that first.

Defending cities is the more difficult task. I agree we should address the task of trying to defend our allies' population centers to reduce the pressure that may be placed on them to act in ways that we prefer they not.

But we shouldn't forget our forces. That is more important and easier.

Mr. KYL. Just two quick final questions. Would all of you agree that it would be a good thing for the Soviets to move forward with defense and space talks with us so that we could begin to meld together mutually the concept of offense and defense and try to reach some understandings?

Any disagreement with that?

Dr. CARNESALE. Well, I might. I am in favor of meeting with them and discussing, for example, what is permitted under the treaty and what is prohibited.

I am not eager to try to set up a competition between offense and defense at this stage. I do not think that is a good idea.

But I am prepared to talk to them about it.

Mr. KYL. Excuse me. By that, do you mean that if we deployed, let us say by the year 2000, a thousand Brilliant Pebbles, that that would then cause the Soviets to respond by building more offensive missiles? I am not sure I understood your comment.

Dr. CARNESALE. Well, I would certainly expect them to respond in some way.

All I know is that no one in the past has ever said it was beyond the Soviet's economic capability to do something militarily. We just kept marveling at how their civilians suffered in order to do it.

Mr. KYL. Wait just a second. I mean one of the real arguments for Brilliant Pebbles, the relative efficacy of trying to defeat that with offensive missiles many many times more the cost of the incremental—

Dr. CARNESALE. Excuse me, I misunderstood you.

We are back to the theory. What I was saying is that I believe there is no basis for that judgment. It is an aspiration, it is not a technical judgment. We just don't know enough about the system.

If it turns out that Brilliant Pebbles, contrary to my intuition, turns out to be the magnificent system that really clobbered offenses and makes up for the 40 year head start that they have, I want to deploy it quickly. I just find that unlikely.

Mr. KYL. Mr. Perle.

Mr. PERLE. Yes. It simply is not the case historically or logically that there is always a response by one side to developments by the other, and the example is our failure to respond to Soviet bombers. We chose not to mount the defense against them. We knew that we were vulnerable to them. We are vulnerable to Soviet bomber aircraft today.

We have chosen to respond to those threats that seemed fundamental to our security interests and I do not believe that a limited antiballistic missile defense system would pose the kind of threat to the Soviet Union that would cause them, in their state of economic collapse and technological inferiority, to make what would inevitably be a futile effort to overcome that limited capability.

That is a new factor, a post-Cold War factor, if you like, because the Soviets, I believe now, are prepared not to even attempt to deal with every military system that we are capable of deploying. They will deal only with those that are fundamental to their security and only where they have the realistic opportunity of technological success.

This gives us very substantial scope to proceed with strategic defenses that could be terribly important to us in a lot of contingencies not involving the Soviet Union, and that we have refrained from pursuing in the past largely out of the fear that the Soviets would respond by measures that would leave us worse off. That is no longer the case today.

Dr. POSTOL. May I interject some objective information here?

Mr. KYL. Yes.

Dr. POSTOL. The reason the United States has not spent a lot of money on air defenses is because in a period when we were spending a lot of money on air defenses, and it made sense, the ICBM emerged as a major new weapons technology and the result of that technology was that analysis showed that it was relatively straight forward to suppress the air defenses to create holes for the bombers to fly through with ICBMs and that the air defenses weren't up to the job of defending themselves against ICBM attack.

That is the reason why the United States wisely made the decision to spend its defense dollars in other ways. It is not that air defenses are a stupid idea. I think they are a great idea if you can get them to work, but we all know that we have a finite amount of defense dollars and we have to spend those dollars as intelligently as possible.

On the question of Brilliant Pebbles, you can deal with the problem of Brilliant Pebbles at a level beyond that of impressions and I don't want to get into details because it depends on all kinds of details, but if people are interested, I would be happy to meet with either individuals or staff members and discuss those issues and to provide analysis.

That is to say, materials that you can take and examine whether it is technically correct or not, to assess whether Brilliant Pebbles will function in a given situation, under a given set of assumptions

and, if that is useful, I would be happy to make myself available and to have this material subject to scrutiny by technical people.

Mr. KYL. May I just ask one question. You have not expressed yourself in opposition to continued research on Brilliant Pebbles.

Do you think that that research ought to go forward or not—ought to be funded or not?

Dr. POSTOL. Well actually, I do not really—quite frankly, I don't see that Brilliant Pebbles is an especially good way to spend our SDI dollars.

Again, I have no problem with spending SDI dollars, but frankly my technical judgment is that Brilliant Pebbles appears to be a non starter.

Mr. KYL. But Dr. Postol that is directly—excuse me for being argumentative here but—

Dr. POSTOL. Sure, please.

Mr. KYL. The people in the program itself have an absolutely contrary view and, at least to my satisfaction, have demonstrated great potential for Brilliant Pebbles being technically feasible at a relatively low cost.

Now you are suggesting you just do not think that ultimately it is going to work that well.

Why would you be against trying to find out through expending money in SDI?

Dr. POSTOL. Well, the problem is that there are things that depend on whether or not you can achieve a given technical level of performance and nobody can know what the outcome of research will be on those things.

So those judgments are subject to debate and—

Mr. KYL. But it is probably true that you will never know unless—

Dr. POSTOL. Hold on—hold on. The problem is that if I tell you that I am going to build a system that is going to move me across the room in 3 hours, but I need to do it in 1 minute, then the analysis tells you that even if I build the system, it is not going to do the job.

The problem with Brilliant Pebbles is that when you sit down and you analyze the system, according to the claims that have been made by those who would claim that they can build this, it does not do the job if they achieve the technical performance levels that they claim.

Mr. KYL. How can you say that?

Dr. POSTOL. I have studied it.

Mr. KYL. Well Dr. Postol, with all due respect, the proponents here are not trying to waste taxpayer dollars.

Dr. POSTOL. I understand that.

Mr. KYL. When you say that it will not do the job, what job are you talking about?

Are you talking about meeting the limited objective of the GPALS, for example? Will it not do the job that it is designed to do as part of the layered defense system in GPALS? Where will it fail, assuming that it achieves the technological—

Dr. POSTOL. I think again it depends on the defense and the offensive threat that you are facing.

If you want me to invent a strapped down chicken for the defense to deal with, I can do it. But the fact of the matter is that if we have a short range ballistic missile, it can easily under fly the GPALS defense, and you can just look at the appendix to my testimony, I have calculated those numbers for you.

Mr. KYL. You can say all kinds of things that it would not be effective against, but let us talk about those things it is designed to be effective against.

You said it wouldn't do its job.

Dr. POSTOL. The February 12th—

Mr. KYL. If its job is defined as protecting against a ballistic missile, in other words more than a 100 kilometers altitude, fired accidentally or by some rogue commander in the Soviet Union or by a Third World country that has a missile that exceeds that 100 kilometers and if it has achieved its technical capability to do it, then how do you say it wouldn't do its job and therefore—

Dr. POSTOL. Please do not put words in my mouth.

Mr. KYL. You said it would not do the job.

Dr. POSTOL. Let me repeat myself—

Mr. KYL. All right.

Dr. POSTOL. Then we will try and sort this out.

It depends on the nature of the threat that we are dealing with. All right.

Mr. KYL. Of course.

Dr. POSTOL. Now let us note, just for the sake of this discussion, that right now there is a big question whether we can move this system from view graphs to hardware. The view graphs are always changing. It is very difficult to know how to deal with the threat because the view graphs just keep changing faster than you can even analyze the issues, let alone build anything.

The February 12th briefings that I obtained from the Pentagon focused on short range ballistic missiles.

Let me define what I mean by 'short range ballistic missile.' A missile that basically flies a thousand kilometers or less. That threat can easily under fly GPALS.

Now, if you want to talk about the longer range threat, the SS-18 that the adversary conveniently does not do anything to modify and just agrees to stand in front of your defense, yes, the GPALS system, would function as people claim.

Assuming they can achieve those technical parameters it would, in fact, be able to engage the SS-18. So I don't debate that.

Mr. KYL. Well then I gather then the only reason that you would be against proceeding to see whether or not it could work is that you just don't see any threat worth trying to deal with beyond a thousand kilometer range?

Dr. POSTOL. No, no. I could postulate—let me postulate a defense that we might consider spending money to develop.

I will put guns in the ICBM field next to the Soviet silos and when the missiles fly out of the silos, I will shoot them.

Now, are the Soviets going to agree to that kind of situation? Probably not.

The issue with GPALS is the issue of whether or not we might face countermeasures on the part of an adversary.

I am not asserting that we will face countermeasures. Mr. Perle has suggested that there will be no countermeasures. I don't know. Mr. Perle knows, but I do not, so I can't give you an answer.

Dr. POSTOL. I did not suggest—

Mr. KYL. Let Mr. Perle speak for himself here.

Mr. PERLE. I did not suggest there would be no countermeasures.

What I objected to is something I have objected to for 25 years which is the opponents of Strategic Defense always assuming that there are cheap and easy ways to defeat the defense.

Of course, it is easy to sit here and say, I can design a cheap and easy decoy, which you were saying earlier.

Dr. POSTOL. It has been designed.

Mr. PERLE. What you end up with is the assumption which I think derives from preference, that the defense is always going to be defeated by the offense and I do not believe there is reason to accept that at face value.

Mr. KYL. Mr. Chairman, we have gone on too long with my time any way. I think we are to the point where we are a cat chasing its tail.

I just want to make the observation when you talk about decoys, that is the whole idea of a space-based Brilliant Pebbles type of system to try and hit in a boost phase, prior to the time that you have to worry about mid course decoys and that is why I think there are advantages to having both the E squared I and a Brilliant Pebbles which can therefore obviate the whole issue of decoys. Thank you.

The CHAIRMAN. Jim McCrery.

Mr. MCCRERY. Thank you, Mr. Chairman.

I am impressed with the quality of the panel that you have assembled, Mr. Chairman.

Dr. Postol teaches at MIT. Dr. Carnesale at Harvard University, two very well respected universities, so I am sure that you bring us today, not only a lot of education, but a lot of judgment and intelligence.

But what I am reminded of when I hear you two gentlemen speak is the phrase, "oh ye of little faith." I just am aghast at the lack of confidence you have in our technical capabilities.

What we have accomplished in the few short years of the SDI program must, at least, amaze you a little. For country lawyers like me, it's just astounding what we have been able to accomplish in just a few short years with a little bit of money.

I am pleased to hear Dr. Carnesale say that we need to spend \$4 billion a year and I suspect if we could even do that you might even be amazed at what we could accomplish in the next few years.

I am not sure—Dr. Postol, you said that you had been briefed by the Pentagon and I was pleased to hear that.

Have all of you gentlemen been privy to classified briefings by the scientists who are on the program and have you participated at all in the development of the Red Team philosophy or strategy?

Dr. POSTOL. I have looked at some Red Team activities. I have not participated in them but I have, in fact, reviewed data from Red Team experiments, yes.

Those programs, incidentally, look a little bit under funded to me.

Mr. McCRERY. Have you requested permission to submit, to the Pentagon, approaches or strategies for Red Team involvement?

Dr. POSTOL. No, I have not.

Mr. McCRERY. Might I suggest that you do that in that you are so convinced that you have the strategies that would defeat the scientists on the other side, might you just offer—

Dr. POSTOL. Actually if you look at some testimony I gave, I think, a couple of years ago to a subcommittee chaired by Mr. Spratt, I provided quite a bit of countermeasure technology which was done independent of the Pentagon that nobody has provided what I would call a technically defensible response to.

In fact, during that same session, a Mr. Loomis, from Lockheed, claimed that he could defeat countermeasures of the type that I had suggested that would be done and he was asked to provide the data to the subcommittee and he never provided the data.

So I subsequently talked to one of his people at a classified meeting and they didn't seem to know what we were talking about. So you might want to look into that.

Mr. McCRERY. OK. Let me just ask you a series of questions, just the two distinguished professors.

Are you in favor of producing the B-2? Just "yes" or "no".

Dr. CARNESALE. More than 15?

Mr. McCRERY. Yes. Say a minimum of 75.

Dr. CARNESALE. No, I am not in favor of producing a minimum of 75.

Mr. McCRERY. Dr. Postol.

Dr. POSTOL. A question like that, I just can't answer it. I just do not know what the objective of the question is.

Mr. McCRERY. Well, in today's environment, if you had to vote on the B-2, would you vote "yes" or "no"?

Dr. POSTOL. I am not a decisionmaker. I am just here to provide—

Mr. McCRERY. You explained that.

Dr. POSTOL. If you want to know what the technical issues are that are associated with the B-2—

Mr. McCRERY. I'm just asking, if you were a decision maker, could you make a decision?

The CHAIRMAN. Dr. Postol, your modesty here is very becoming. Let the record show that neither Carnesale nor Perle have any qualms about telling us what to do.

Dr. POSTOL. Let me repeat a story from the Pentagon, when I was working for the Chief of Naval Operations, as a Senior Scientist there.

I had a very sharp exchange with an Admiral who I was working with, where he said, "Postol, you will never take a position on anything." I said to him, "Your job is to make the decision, mine is just to try and show you what the up side and down side is."

I am sorry—I know you are just a country lawyer, but I am just a poor academic.

Mr. McCRERY. Unfortunately we do not have time for you to give us the up side and the down side of the B-2, but we will just put that aside.

You have already said that you are against deploying Brilliant Pebbles or against deploying a space-based system for SDI.

Dr. Carnesale, you did say that if it could be proven to you that SDI, Brilliant Pebbles could work that you would deploy it. Is that correct?

Dr. CARNESALE. Yes.

Mr. McCRERY. What about ICBM modernization, are you for putting the MX on rail or are you for building the small ICBM on trucks?

Dr. CARNESALE. I am in favor of a small ICBM initially in silos.

Mr. McCRERY. Dr. Postol.

Dr. POSTOL. I think ICBM modernization makes a lot of sense and what we have to do in the next decade, I think, is modernize our forces in a way that allows us to have higher confidence in the survivability of those forces and, quite frankly, it is complicated to decide exactly how to go about doing that because some of the technical problems we face, in basing a land based ICBM survivably are very serious.

But any scheme that is affordable that would allow us to base ICBMs survivably on land, I think would be a very good idea.

Mr. McCRERY. There you have the problem, Mr. Chairman. We do have finite dollars for the Department of Defense, however, I would submit that we have, as a nation, more assets at our disposal than do the Soviets, at this particular time in history. I think we have the Soviets at a disadvantage from an economic standpoint.

The question then should be, do we move forward now and use our strength, use our unequal ability that is in our favor or should we say, since we don't believe the Soviets are going to modernize their air defenses or since we do not believe the Soviets are going to put in space an asset or an SDI system, since we think the Soviets are going to retrench and try to recover their economy, then let us just stop developing our defenses and spend money on all the other things we would like to spend money on.

That is the fundamental question that we are to here today. I happen to be of the opinion that we should move forward on a number of fronts, not only ICBM modernization, even to the very limited extent that you gentlemen have suggested, although Dr. Postol, you never really gave us a hint as to what you would do.

Dr. POSTOL. Practical possibilities do have to matter here.

Mr. McCRERY. Big surprise. I think we should move forward with SDI research, at a minimum of \$4 billion a year. We ought to move forward on the B-2 and produce 75. We ought to move forward on ICBM modernization.

Those strategic programs form a relatively small amount of our defense budget in this country. We do have other needs and have got to fit them all in.

But I appreciate you gentlemen coming today and sharing with us your knowledge and your opinions. I look forward to having you back some day.

The CHAIRMAN. Richard Ray.

Mr. RAY. Mr. Chairman, thanks a lot. I know I am the last witness and I will not prolong the gentlemen very long.

I do appreciate you gentlemen coming down today. I appreciate it very much.

If I could, Mr. Chairman move away from the sophistication of SDI and talk a little bit about tactical ballistic defense.

Just to give you a little bit of background for about a decade, all of the 1980's, this committee worked very hard with the Department of Defense to try to force a defense against tactical ballistic missiles against our military bases in Europe and nuclear weapons storage in some urban areas.

Not until after 1988 were we able to convince the Department of Defense to improve the Patriot with software to where it would at least target incoming missiles.

During this decade, about 10,000—8 to 10,000 tactical ballistic missiles were aimed from the Soviet Union toward Europe. I am not sure, but some of you may know if we still are targeted in any degree.

Do you, Mr. Perle or anybody have any idea whether the Soviets have agreed to remove those tactical weapons or not?

Mr. PERLE. Some have been removed, but they continue to have tactical nuclear weapons in quite sizeable numbers.

Mr. RAY. I see. I think it is important for us to take what technology we have and improve it. I do know that certain programs are under way right now by two or three defense companies, one main defense company in particular, which would improve the Patriot to deal in a more sophisticated way with incoming tactical weapons. I think it is very important that we do that.

It also would appear to me and I would like to have your impression, that in the next decade, that we are more of a threat from emerging Third World countries or others against tactical weapons rather than inter continental ballistic weapons and should we not have a very strong defense in that respect?

Dr. POSTOL. May I respond?

Mr. RAY. Yes, sir.

Dr. POSTOL. I think we are facing a situation now where the world economic development is leading to the wide availability of efficient jet engines and guidance systems and technology that generally will support an industry for small private aircraft.

Much of this technology may be divertable by Third World countries for terrorist purposes. The Patriot defense has really quite an exceptional capability against these low flying missiles. Sometimes they are called Cruise Missiles, but there are many different kinds of Cruise Missiles. So I think this kind of defensive capability is really quite strongly in our interest to develop.

I might point out though—again, I am not trying to attack the system. I think this is a very good system. But I think that we ought to be sensitive to the nature of technology in the area of missile technology.

The easiest kind of stealth target I can imagine building is a missile. Unlike an airplane, it doesn't have to have antennas and sensors on it, it doesn't have to carry pilots and it does not have to be stable in the same way. Building very stealthy missiles are well within the reach of many weapons suppliers in the world. So we have a big political problem here to face.

But certainly I think improving air defense capability against these missiles is a very important and wise thing for us to be working on.

Anyone else?

Mr. PERLE. I certainly agree with that.

Mr. RAY. In closing, let me just say a couple of things.

The Armed Services Committee here has had to fight awfully hard to encourage the Defense Department and Air Force to move away from the defensive missiles, by F-15's and F-16's.

I think if it had not been for some of the funds which we forced into the budget during that decade, we would not have had the advantage of the Patriot and its capability in the recent conflict.

Mr. Chairman, I would like to submit for the record about 13 pages, a documentary of what this committee has done. Questions it has asked, legislation it has enacted during the last decade which brought about the success of the Patriot and I just, with permission, ask that it be put into the record.

The CHAIRMAN. Without objection.

[The documentary follows:]

SUMMARY OF ACTIONS TAKEN BY THE HOUSE ARMED SERVICES
COMMITTEE AT THE DIRECTION OF REP. RICHARD RAY REGARDING
NATO AIR BASE DEFENSE

Mr. Chairman:

Today we are discussing the effectiveness of the Patriot weapon system during Operation Desert Shield/Storm. Although the views of our witnesses vary on the effectiveness of the Patriot, I believe the Patriot proved successful.

The Patriot was first budgeted in the House Armed Services Subcommittee on Research and Development during Richard Nixon's term as President. There were several attempts to kill the Patriot by some Members and staff because of its cost and the difficulties it incurred during development. However, the House Armed Services Subcommittee on Procurement and Military Nuclear Systems became concerned that even though the United States had held a large military presence in NATO for over 40 years, a military base defense plan did not exist. There was not an existing plan of defense against the expected the onslaught of Soviet tactical ballistic missiles followed by waves of Warsaw Pact fighters and bombers.

From 1983 through 1988, the House Armed Services Committee (HASC) was the driving force behind legislative measures creating an air base defense plan. This plan was followed by authorizations and appropriations of the Patriot program. Admittedly, the Patriot defense against the theater ballistic missile threat must be further perfected. However, the Patriot has performed in a surprisingly effective manner in the heat of battle, nevertheless.

A history of the committee's support of the Patriot and an air base defense plan is summarized as follows:

*1983--In the FY 1984 Department of Defense (DOD) Authorization bill the House Armed Services Committee (HASC) directed the DOD to submit a comprehensive air base defense plan by February 1, 1984.

On April 8, 1983, the House Armed Services Subcommittee on Procurement and Military Nuclear Systems held a hearing on Air Force Space and other Procurement Programs. Major General Bernard P. Randolph, Director of Space Systems and Command, Control and Communications testified with others from the Air Force's Office of Research, Development and Acquisition. General Randolph discussed various Air Force programs, including air base survivability. He described air base survivability as

being a new program. He stated the following:

The Air Force has become concerned about the survivability of its airfields and wants to have the ability to fight after a first attack and this program is directed toward that. The initial \$9.2 million buys some mobile aircraft arresting systems that can be set up on undamaged portions of runways or on streets or taxiways that will allow us to recover our aircraft, repair them and launch the aircraft on another sortie. (p. 1351)

General Hansen, who accompanied General Randolph, added that the whole program was meant to move attention away from our assets. He indicated that aircraft decoys would be purchased in the outyears. Congressman Ray added that many of our bases in Turkey and Europe and Korea were unprotected from firepower.

On April 25, 1983, the House Armed Services Subcommittees on Procurement and Military Nuclear Systems and Research and Development held a joint hearing on NATO Conventional Capability Improvement Initiatives. Congressman Ray questioned Dr. James P. Wade, Jr., the Principal Deputy Under Secretary of Defense for Research and Engineering, on whether the U.S. had adequate air defense for European bases. Dr. Wade responded that we did not. Dr. Wade stated the following:

My personal judgment is that our current deployed air defense assets in NATO Europe are inadequate and inadequate by a very substantial margin. Our plan or program that was put together several years ago, if fulfilled, was not adequate today; it was inadequate against today's threat, and the Department is working through new initiatives like Counter-Air 90 to readdress that shortfall. I think we can fix the problem but it is going to take us years to do so." (p. 1727)

Dr. Wade further asserted that the only way to solve the problem was through an integrated approach which combined air and land assets together with that of our allies. When asked what systems the U.S. had deployed in Europe for air defense purposes, Dr. Wade answered that we had the Patriot program, improved Short Range Air Defense (SHORAD) systems and the F-15. Dr. Wade also said that the most difficult threat we would face would be the threat posed by Soviet tactical ballistic missile systems with conventional warheads.

Congressman Ray again pointed out the vulnerability of our bases in Europe to air attack and our continued lack of an adequate air defense program. Congressman Ray asked Mr. William

Schneider, the Under Secretary for Security Assistance, Science, and Technology for the Department of State, if he thought the Patriot would be used for protection of our bases in Europe. Mr. Schneider said that the Patriot would be used for that function, and that it would serve a real purpose that is desperately needed.

During a continuation of the hearing, Congressman Ray made the observation that base protection in Europe did not have a strong constituency in Congress or in the military. Congressman Ray asked General Bernard W. Rogers, Supreme Allied Commander---Europe and United States Commander-In-Chief--Europe (USCINCEUR), whether the House Armed Services Committee needed to press this issue further. General Rogers responded that base protection throughout the alliance had a lower priority than a number of other areas. Congressman Ray indicated that he wanted to encourage work in this direction "to instill some more serious thought toward base protection." (p. 1802)

*1984--DOD did not submit the air base defense plan as requested, and the HASC passed the Ray Amendment to the FY 1985 DOD Authorization bill, which fenced Air Force funds for the F-15-E dual role deep strike fighter until the Secretary of Defense submitted an air base defense master plan. DOD agreed to prepare a plan for defending the air bases and the amendment was deleted in conference. Additionally, repending to Congressman Ray's concerns that there was confusion over which service had responsibility for the mission of air base defense, DOD officially assigned the mission to the Army.

On March 7, 1984, the House Armed Services Subcommittee on Procurement and Military Nuclear Systems held an overview hearing on the FY 1985 DOD Procurement Authorization. During this hearing Congressman Ray questioned Dr. Thomas E. Cooper, Assistant Secretary of the Air Force for Research, Development and Logistics, about what type of air base defense plan the U.S. had. Congressman Ray stated that he did not believe the U.S. had a plan, but desperately needed one. Congressman Ray stated that we needed a plan over 8 or 10 years that would be adjustable. Dr. Cooper did not address the notion of an overall air base defense plan, but discussed the fact that the Rapier program was underway, and that the U.S. was in the process of working with the United Kingdom on air base defense.

On March 21, 1984, the Procurement Subcommittee held a hearing on the master air base defense plan. The hearing was held because the HASC had directed the Department of Defense to submit an integrated air base defense plan to Congress in connection with the defense budget. The plan had not yet been received when the hearing was held.

In his opening statement Congressman Samuel S. Stratton,

Chairman of the Subcommittee, discussed the fact that DOD lacked urgency on the subject of an air base defense plan, and the subcommittee wanted to determine whose responsibility air base defense should be, since no clear agreement existed between the services. In addition, Chairman Stratton stated that the FY 1985 budget request did not contain funding for point air defense of our bases in Italy, the Netherlands, or in Spain.

Dr. James P. Wade, Jr. testified again before the subcommittee. Dr. Wade discussed the fact that an increasing Warsaw Pact air threat posed a significant problem to NATO air and ground forces. He indicated that the Soviets continued to modernize their tactical air forces in such a way that they had shifted from a predominately defensive force to one more oriented toward offensive operations. He labeled air base defense in NATO as a cooperative endeavor. Dr. Wade stated that an overall plan for air defense was developed in 1978-1979 by the NATO Air Defense Planning Groups as one of nine functional areas of NATO's Long Term Defense Program. Dr. Wade indicated that the Long Range Air Defense Plan was in the process of being changed.

Dr. Wade stated that the services understood the increasing Soviet threat, but differed in opinion as to how urgent and quickly a plan for air base defense was needed. The services also had some disagreement as to what each service's role should be.

Congressman Ray insisted that we needed a coherent and decisive air base defense plan whether our NATO allies agreed with it or not. Congressman Ray also said that one agency must be responsible for this plan. Congressman Ray stated that it did not make sense to spend large sums of money on expensive weapon systems like dual role fighters when we were sending them to bases in which inadequate protection existed for them, and no Patriots or any type of a missile were there to protect the investment.

In light of our continued investment in new barracks and new equipment in Europe, Congressman Ray stated that this was clearly an issue that the House Armed Services Committee would have to make a strong priority. Further, the plan ought to include the southern flank of NATO, southwest Asia, and NATO itself. Chairman Stratton asserted that there was no clear explanation of why the DOD had not used funds appropriated for the creation of the air base defense plan.

On March 27, 1984, the Procurement Subcommittee held a hearing on DOD Command, Control, Communications and Intelligence Programs. Mr. Donald C. Latham, Deputy Under Secretary of Defense for Command, Control, Communications and Intelligence

testified. Congressman Ray asked Mr. Latham about what type of air base defense was in place for our bases in Europe. Mr. Latham responded that we were deploying the Patriot, that we negotiated with the Germans to deploy Roland missiles, and that we were building additional aircraft shelters.

Congressman Ray mentioned to Mr. Latham that the House Armed Services Committee had been digging into the issue of the survivability of NATO bases. Congressman Ray pointed out that despite heavy investment in those bases, there seemed to be a lack of defense for them. Mr. Latham said the problem had received consideration by DOD, and that plans were being developed for rapid runway repair and aircraft sheltering. Congressman Ray said that he had not been able to locate a comprehensive air base defense plan.

On March 28, 1984, the Procurement Subcommittee held a hearing on NATO Arms Cooperation. Dr. Richard D. DeLauer, Under Secretary of Defense for Research and Engineering testified before the Subcommittee. Congressman Ray again indicated the difficulty in obtaining an overall plan of airbase survivability and defense. Mr. Ray expressed the belief that there was no constituency for this in the Pentagon. Dr. DeLauer stated that he felt there was no one group to address themselves to the question of the survivability of assets. Dr. DeLauer indicated that the Patriot helped the situation, but the most effective way to survive was to shelter our aircraft.

October 1984--Congressman Ray visited 15 air bases in Europe to review their air defense capabilities.

*1985--DOD sent a draft of "NATO Air Defense of Allied Command Europe" to the HASC. In the FY 1986 DOD Authorization bill Congressman Ray chided DOD for not requesting funds to continue cooperative air defense funds in NATO, and added \$125 million for this purpose. This was eventually reduced to \$75 million in conference.

On February 5, 1985, the House Armed Services Committee held a hearing on the FY 1986 Department of Defense budget. Secretary of Defense Caspar Weinberger testified before the committee. Congressman Ray raised the issue of umbrella and point air defense with the Secretary. Mr. Ray stated the following:

In some quarters there is an impression that we are giving only token attention to this part of our defense program and that we could pay a rather serious price for it in the long run. We (the House Armed Services Committee) asked for a plan to include a measurement of the

threat with which we are confronted, identification of the deficiencies in our present system and a clear outline of the plan that we were to develop in cooperation with our NATO allies to correct these deficiencies. (p. 399)

Congressman Ray indicated that the plan was to address a broad spectrum of air defense threats and solutions being proposed. This understanding was based upon testimony received by the Subcommittee on Procurement. The plan was also to include an assessment of the Soviet development of tactical conventional missiles which pose a threat to our air bases. Congressman Ray indicated that without such a plan he wondered why we should continue to procure reinforcement aircraft or aircraft designated for NATO when the aircraft may not survive.

Congressman Ray also questioned Secretary Weinberger on the Roland/Patriot agreement. Mr. Ray stated that the Patriot agreement with Germany was a strong beginning for a NATO air defense plan, but much of NATO remained unprotected.

Secretary Weinberger indicated that the air base defense plan would be completed shortly, and that the Soviets had substantial penetration capabilities that they are trying to develop with intercontinental bombers. The Secretary indicated that the Roland/Patriot agreement was producing positive results.

On February 6, 1985, the House Armed Services Committee held a hearing on the Posture of the U.S. Army in relation to the FY 1986 budget. General John A. Wickham, Chief of Staff of the Army, testified before the committee. Congressman Ray questioned General Wickham on an airbase security agreement in which the Army would take over all airbase security, the effect of Gramm-Rudman on the Roland/Patriot agreement, and the overall air defense plan. General Wickham said the airbase security agreement with the Air Force was proceeding, the Patriot agreement was moving along well, and that the Secretary of Defense was in the midst of preparing an umbrella air base defense plan which he would bring to Congress soon.

On February 6, 1985, the House Armed Services Committee also heard testimony from General Charles Gabriel, the Air Force Chief of Staff, regarding the posture of the U.S. Air Force. Congressman Ray asked General Gabriel if the agreement between the Army and the Air Force regarding airbase security systems was on target. General Gabriel indicated that the Army would be responsible for off-base defense. The General said it would take time to determine who would be responsible for what.

Congressman Ray added that the general problem with which

he was concerned was the fact that there was no umbrella air base defense and point air defense plan in place, and that it was a major weakness. Congressman Ray reminded the committee that, at his request, Secretary Weinberger was expected to present an overall plan for NATO air base defense in the near future.

On February 7, 1985, General P. X. Kelley, Commandant of the Marine Corps, testified before the House Armed Services Committee regarding the FY 1986 defense budget and the posture of the Marine Corps. Congressman Ray asked General Kelley if he was aware of the air base defense plan being readied by Secretary Weinberger. General Kelley stated that umbrella air base defense in the Pacific is one of the most important issues that we have at hand. He added that the Alaskan frontier doesn't have the air defense network it should.

On February 27, 1985, the Procurement Subcommittee held a hearing on the DOD/NATO Cooperative Programs and NATO Air Defense Master Plan. The subcommittee heard testimony from Mr. Louis G. Michael, Assistant Under Secretary of Defense for Plans and Development, Office of the Under Secretary for Research and Engineering, and Dr. Dov S. Zakheim, Assistant Under Secretary (Policy/Resources), Office of the Under Secretary for Policy.

In his opening statement, Chairman Samuel Stratton indicated the subcommittee's concern about the defense protection of U.S. assets in NATO. The Chairman mentioned the fact that Congressman Ray had been pursuing this matter, but had yet to uncover a defense posture. The Chairman stated:

This is precisely the matter that Congressman Ray has been pursuing, and while there is a lot of high-falutin talk about what is being done, there is still no defense posture in position at this point. Obviously, our concern must be expressed that this ad hoc approach is no adequate substitute for comprehensive treatment of critical military requirements. (pp. 2-3)

The master plan was not submitted to the subcommittee during this session. However, aspects of the plan were discussed in some detail. Mr. Michael indicated that the Department of Defense and the Joint Chiefs of Staff were involved in preparing the plan to promote cross service coordination. Mr. Michael indicated that the plan involved the four regions--the northern region, the UK Air Defense Region, the central region, and the southern region. Mr. Michael also indicated that we have modern air defenses at 14 of our main operating bases (U.S.), and 45 of our collocated operating bases.

Congressman Ray reiterated the fact that the Congress had

requested an overall master plan in 1983. Mr. Michael stated that he believed that the money appropriated for cooperative air defense had been well-applied to the overall air defense mission. Chairman Stratton expressed his dissatisfaction with such a vague statement.

Much of the discussion during the hearing centered on how funds had been spent thus far, specifically, the \$340 million appropriated from FY 1981 through FY 1984. Mr. Michael and Dr. Zakheim explained that this money was used for the Turkish/U.S. Rapier Program, the U.S./Italian Program, the U.S./Netherlands Patriot Initiative, the U.S./Belgium Patriot Initiative, and the Roland/Patriot Agreement with Germany.

The subcommittee expressed some concern about who was to be in charge of coordinating the master air defense plan. Mr. Michael indicated that no single person was in charge of coordinating the air defense plan. Rather, all services had a contribution. Chairman Stratton expressed concern with the fact that no single individual appeared to be in charge. Dr. Zakheim stated that Mr. Michael was coordinating the efforts to formulate the plan.

The subcommittee continued to express concern about how the appropriated funds from years past were being spent. The witness again discussed the Patriot agreements and purchases of fire units and missiles.

In material submitted for the record, the witnesses indicated that the report was being reviewed by the Department of Defense, and should be completed by April 10, 1985.

On March 7, 1985, the Procurement Subcommittee held a hearing on Army air defense programs. Brigadier General Donald P. Whalen, Director of Weapons Systems for the Deputy Chief of Staff for Research, Development and Acquisition for the Army, testified before the subcommittee. Major General James P. Maloney, Commanding General of Fort Bliss, also testified.

General Maloney pointed out that the Patriot was the largest dollar item in the Army's FY 1986 budget. Congressman Ray verified with General Maloney the fact that the Patriot system would protect NATO, and would knock down approaching airplanes before they could reach airfields.

General Maloney stated that the U.S. Army would be reducing the Hawk system to accommodate the insertion of Patriot. Congressman Ray questioned whether we would need the Hawk in our inventory to protect the airspace along with the Patriot. General Maloney indicated that we would need it, and that we wanted to retain as much of the Hawk as we could. Congressman Ray then added that air base defense was vital and we ought to phase

out something else rather than letting critical aspects of our air defense plan, such as Patriot and Hawk, be sacrificed. Mr. Ray stated that he thought the U.S. needed Patriot and Hawk more than a lot of airplanes.

March 27, 1985 the Procurement Subcommittee held a hearing on the Fiscal Year 1986 Defense Authorization request. Congressman John Porter of Illinois testified before the subcommittee on the delivery of binary weapons. Congressman Ray discussed the fact that the Soviet Union would likely deliver tactical missiles against U.S. forces in the area which could be equipped with a chemical warhead. Congressman Ray pointed out that while we are spending a great deal of funds on F-15 and F-16 aircraft, we need a way to meet these missiles head on.

May 15, 1985--DOD sent the final classified version of the plan to the HASC. Congressman Ray called the plan a step in the right direction but didn't feel it went far enough.

October, 1985--An article by Congressman Ray detailing his concerns and actions regarding air base defense, appeared in the Armed Forces Journal.

*1986--In the FY 1987 DOD Authorization bill, a Ray amendment was included to restrict the use of NATO infrastructure funds until DOD submitted an adequate master plan for air base defense. The amendment also called for DOD to certify that funds were budgeted for the next five years to implement this plan.

On February 24, 1986, the Procurement Subcommittee held a hearing on Department of Defense Offshore Procurement Practices. The Honorable James P. Wade, Jr., Assistant Secretary of Defense for Acquisition and Logistics, testified before the subcommittee. Congressman Ray questioned Dr. Wade extensively about an air base defense plan. Mr. Ray expressed his pleasure with the appointment of Don Frederickson as special coordinator for point air defense. Congressman Ray indicated that the subcommittee had received the NATO air base defense plan and had sent that plan back with suggestions for modifications.

Congressman Ray then asked what cooperative air defense programs were being planned for our NATO allies? Dr. Wade responded that the major success story was the Roland/Patriot agreement between the U.S. and the Federal Republic of Germany. Congressman Ray reminded Dr. Wade that the previous air base defense plan sent over by Defense Secretary Weinberger had been sent back with suggestions and modifications. Dr. Wade indicated that if an enemy attack were to occur, one of the first actions would likely be an air attack.

Congressman Ray also asked whether the cancellation of

DIVAD had adversely impacted on our plans for improving NATO air base defense. Dr. Wade responded that a viable air defense must be one of our highest priorities, and that the Department of Defense had been spending a lot of time on improving our air base defenses. Dr. Wade also stated that the cancellation of DIVAD had a negative impact on our plans for improving NATO air defense. Dr. Wade also stated that, in his judgement, the U.S. was deficient in having adequate forces in place to defeat the Warsaw Pact air threat. When asked what cooperative air defense programs were being planned for our NATO allies, Dr. Wade responded that the major success story was the Roland/Patriot agreement with Germany.

On February 27, 1986, Major General Donald R. Infante, Commanding General of the U.S. Army Air Defense Artillery Center, testified before the Procurement Subcommittee regarding Fiscal Year 1987 Army Air Defense Programs. General Infante presented his Army Air Defense Program procurement budget, which reflected funding for the Chaparral, the Patriot, the Stinger and the Hawk. Congressman Ray asked if this fit into the overall DOD air defense submitted by Secretary Weinberger. General Infante said that it did. General Infante also said we had improved our NATO air base defense with the Roland/Patriot agreement.

June/July 1986--Congressman Ray, accompanied by Don Frederickson, visited nine bases in Europe to review the status of DOD air base defense programs. As a result of the trip Congressman Ray asked the House Armed Services Committee Chairman Les Aspin to hold hearings early in 1987 on the issue of air base defense. Don Frederickson promised Congressman Ray that a revised master plan would be ready in time for the 1987 hearings.

*1987--To encourage further development of the air base defense plan, the HASC restricted the obligation of the United States' share of NATO infrastructure funding after FY 1988 until: 1) The Secretary of Defense submitted a true master plan which included the defense of air bases and 2) The Secretary of Defense certified that he had budgeted sufficient funds in the FY 1988 five year defense plan to pay for this air base defense plan. In addition, the HASC requested the General Accounting Office (GAO) to evaluate the Department of Defense's efforts to identify and correct NATO air base defense and survivability deficiencies.

On March 5, 1987, the Procurement Subcommittee held a hearing on NATO Programs and the Air Base Defense Master Plan. Testifying before the subcommittee were Congressman Richard Ray and Mr. Don Fredericksen, the Deputy Under Secretary for Research and Engineering.

Congressman Ray testified that focus had not been given to short range and point air defenses during the 38 years that NATO had been in force. Current NATO defense plans called for allied forces to gain and maintain air superiority in the event of European hostilities. The U.S. and its European allies have invested heavily in costly aircraft for this purpose. However, much of this aircraft could be rendered useless if planes could not be launched or recovered from our main and co-located operating bases. Such a situation could be prevented with an adequate air base defense. Congressman Ray pointed out that the U.S. and NATO must be prepared for the increased exposure of our NATO bases to more enemy aircraft and the threat of tactical ballistic missiles.

Congressman Ray pointed out that imbedded in our war fighting strategy was the requirement for air superiority which is to be achieved by our fighter aircraft. We have modernized our fighter aircraft, but we have been remiss in providing the appropriate defenses for our NATO bases which would ensure that those fighter aircraft make it into the air.

Congressman Ray outlined NATO air defenses. In Central Europe, a layered approach has been used involving Patriot, improved Hawk, some Chaparral surface-to-air missiles and Vulcan guns. Central Europe, according to Mr. Ray, was inadequately protected, and northern and southern NATO appear in even worse shape. However, if the U.S. and NATO maintain the dependency on aircraft to stop an air invasion, a broad air base defense is mandatory. Such a defense must include ground security systems, warning radars, command and control systems, counter air fighter planes and surface-to-air missiles.

Mr. Ray indicated that the Department of Defense had begun to address this problem, but not without prodding from the House Armed Services Committee. In 1985, for instance, the House passed the Ray amendment to the Department of Defense Authorization bill which made approval of the Air Force's then new F-15E dual role fighter contingent upon action on a European air base defense plan. This resulted in an initial draft of a plan for NATO air defense of Allied Command Europe. The final plan was sent to Congress in May of 1986, but did not resolve the Armed Services Committee's concern with air base defense.

When asked where he thought the greatest threat came from, Congressman Ray responded that there were two threats; One from tactical ballistic missiles, and one from Spetsnaz forces around Western Germany and Central NATO. House Armed Services Committee staff explained that three cooperative agreements between the U.S. and the NATO allies existed with regard to NATO air base defense. The first was the Patriot/Roland agreement with Germany. The second was the Rapier agreement with Turkey, and the third was the Rapier agreement with the United Kingdom.

Agreements with Italy for the Patriot and the Spada were ongoing.

Following Congressman Ray's testimony, Don Fredericksen made his remarks. Mr. Fredericksen said that Congressman Ray's characterization of the threat was right on target. Mr. Fredericksen indicated the usefulness of an air base defense plan, and how its creation forced the Department of Defense to take stock of the types of air threats we face. He described the Hawk and Patriot belts mentioned by other witnesses in previous hearings.

*1988--the GAO did a report on the status of the Air Force's air base operability program (ABO) at U.S. main operating bases in Europe at the request of Chairman Les Aspin. The GAO concluded that the U.S. Air Force Europe (USAFE) had programs which "identify and, to a lesser extent, correct air base operability (ABO) problems at both its main and collocated operating bases. However, the effectiveness of the programs is questionable due to the reallocation of funds from the ABO program to other, higher priority USAFE programs." (p. 2)

The GAO also pointed out that Salty Demo was the Air Force's first extensive demonstration of the ability of its bases to sustain wartime sorties during and after air and ground attacks. Salty Demo was conducted in the spring of 1985 at Spangdahlem Air Base in West Germany. Results of the exercise are classified.

The Air Force's Scientific Advisory Board studied the detailed results of Salty Demo. The Board concluded the following:

There is a serious and growing threat to the capability of air bases around the world to support the projection of air power in the future. Over the last 40 years the Air Force has become increasingly dependent on a decreasing number of large, fixed bases...Further, these bases are becoming increasingly vulnerable to new weapons capabilities, and it appears that vulnerability will continue to increase in the coming decades. The increasing vulnerability of the present basing posture could cause the U.S. Air Force to lose a war." (p.3)

The Air Force issued in December 1986 a regulation (360-1), which provided guidance to air base and theater commanders for planning and implementing the ABO program. This regulation stated that the ABO program must integrate active and passive

defense, as well as base recovery requirements and procedures in order to provide an improved capability for bases to survive and operate in attack conditions.

Regarding funding for the ABO, the GAO report indicated that USAFE had requested funds for ABO projects for FY 1988 and FY 1989. However, USAFE chose to reallocate those funds from the ABO program to other programs of a higher priority. GAO commented that, as a result, USAFE's ABO program and its program for collocated bases could not be very effective in addressing deficiencies in the defense, survivability, and recovery of air bases in Europe.

Mr. Chairman, without question the Patriot performed beyond expectations in Operation Desert Storm despite the critical review of off site spectators and Monday morning quarterbacks. Without the Patriot on the scene, there would have been more damage to property and many more lives would have been lost.

The lessons learned, however, are very valuable. Tactical ballistic missile defense must be an immediate priority. The follow-on to Patriot or its equivalent must be in our arsenal in the future.

The CHAIRMAN. Let me ask one question and I am not sure whether the panel members here are the ones that I ought to ask. But it is the one that bothers me the most about this whole defense issue and let me try it out on you anyway.

Let me postulate, for example, two different models of the world.

Model 1 of the world is a world in which you have two superpowers, the United States and the Soviet Union. Both of them are strong militarily and both of them have big defense budgets and enough economy to support it. In other words, it is the model that we would have had 5 or 10 years ago.

In that world, the question about defense comes up and the concern is that if we go ahead with defenses, we will violate the ABM Treaty and in that world, arms control is very important. The arguments against defenses are that the Soviets would counter them and, of course, at that time there was no question that the Soviets would be able to counter them if they wanted to, and probably they would want to.

Now let's try a model 2 world. The Soviet Union is in disarray. It is no longer so clear that they would counter our defenses. It is no longer so clear that arms control is very important. We are now facing a different kind of world where people like Saddam Hussein are more likely to be the enemies.

It is not at all clear that deterrence works with irrational men. In model 1, deterrence is very important and this complicated notion—that offense is good and defense is bad—is really counter intuitive to a lot of people on the street. That reigns in model 1, because deterrence is at the core of it all.

In model 2, maybe deterrence is not so important, because it is just that it is less sure that it works.

As I say, arms control is not so important in the model 2 world. It is not so clear the Soviets would respond. It is a different kind of world.

Does the fact that we are moving from—I guess maybe we haven't totally left—the model 1 world toward the model 2 world change your views about defenses?

I can't ask Richard because Richard wanted defenses even under model 1. But let me try Al Carnesale and Dr. Postol.

Dr. CARNESALE. Yes, Mr. Chairman. Indeed, I indicated in my testimony that given the changes in the world, I believe it nudges things more favorably toward defenses than when we had a pure model 1 world.

So the simple answer to your question is, yes. The harder question is: How much does it get you over the edge, Carnesale? I am not quite there yet, but not because I am opposed to defenses.

It will be a while before N-th country threats to the United States emerge. They pose a threat in the theater now, but not yet to the United States.

I am more favorably inclined than before to defenses. I believe it is worth putting more money into R&D to accelerate defenses as we move toward that second world, although I am not prepared to write off the Soviet Union yet.

The CHAIRMAN. Dr. Postol.

Dr. POSTOL. Well, first of all I think it is very important to have SDI research and I believe strongly that in either world, you are going to definitely want SDI research.

If nothing else, you are going to want SDI research to maintain your confidence that your strategic forces can defeat any enemy defenses which might include the Soviet Union, if you needed to use them.

I think it is important, again I believe and I can't prove this, that we are still in a period of extraordinary uncertainty with regard to what the Soviet Union is truly going to look like in the future.

I am concerned that we could find ourselves in a situation where the Soviet Union perceives an external threat that is serious enough that they begin to pull themselves together to deal with it.

I don't know that will happen. I think it is just as possible that it will just disintegrate and be left with a lot of little republics with a lot of nuclear weapons. Another not very attractive future world.

But again, I do not have a problem with the idea of doing serious research and development in strategic defense technology in either world, I think it is a prudent thing to do.

As far as the theater defense is concerned, I don't agree or disagree with Al Carnesale on this point.

I think it really matters on ones best guess of what the situation could look like over the next decade. I really don't know what to think.

I do think it is very important to do research and development, that I have no question about at all.

I think some upgrades, for example, of the Patriot, would not at all be an unwise way to spend some money if you felt that you had to do something.

But again, I have to hedge because I frankly don't know how to answer the question.

Dr. CARNESALE. If I could clarify or add really to what I just said.

The CHAIRMAN. Sure.

Dr. CARNESALE. Part of the characterization may have indicated that I oppose defense, and that is correct. I have opposed Soviet defenses. It always seemed to me that a deal worth striking, in a model 1 world, was to give up what I feared would be relatively ineffective American defenses in order to avoid having the Soviets run free with defenses.

In the model 2 world, it is not that there is a greater need for American defenses. The decline of the Soviet Union does not increase the need for American defenses. If anything, it decreases the need, but it still is quite real.

As I look ahead I am less concerned about Soviet defenses. Because the Soviets are poor and may not be able to build very good defenses, and because they are likely to be consumed with internal problems and therefore to be less aggressive, I am more disposed toward loosening up the ABM Treaty to permit us to have more defenses, even though I know it means that it frees them up too. I am less concerned about that in the model 2 world than I was in the model 1 world.

Mr. KYL. Would the gentleman yield for just a quick comment?

The CHAIRMAN. Sure.

Mr. KYL. The third point is that the Third World Countries do not necessarily respond to the old deterrence point as we saw with Iraq which would be another reason to have at least the theater defenses being more emphasized now.

Dr. CARNESALE. But the believers in SDI always argued that the Soviet Union had ideas different from ours and certainly we would not want to rely on their being deterred in the same way that we were.

But I agree with your bottom line which says I don't want to have to count on deterrence if I had a real alternative. With the Soviets I thought that I did not have a real alternative. Defending against teeny weeny strikes which is what we are now talking about, is a more achievable goal.

Mr. KYL. Mr. Chairman, if the gentleman would yield again.

The CHAIRMAN. Sure.

Mr. KYL. Could we ask Mr. Perle to comment on the possibility that the Soviet Union may perceive a threat in that Dr. Postol—

The CHAIRMAN. Let me just get back to Al and then we will let Richard, who is for defenses in models 1, 2 and 3, 4 and et cetera comment.

Let me ask Al. As a practical matter—this fact that we may be moving from model 1 to model 2—what does this tell you? As a practical term, does it mean that you would be willing to go higher on R&D money?

Dr. CARNESALE. Yes.

The CHAIRMAN. Entertain the notion of renegotiating the ABM Treaty to allow for some defenses.

Is there any other practical implication of the worlds, in your view, as we shift from this model 1 to model 2 world?

Dr. CARNESALE. I am in favor, as I indicated, of increasing our emphasis on theater ballistic missile defense.

I am also in favor of increasing our emphasis on far out systems that might actually be capable of achieving damage limitations against the Soviet threat some day, for two reasons.

One, we may have deep reductions in offensive forces. We might actually reduce the size of the Soviet threat substantially. Ten years ago most of us, whether hawk, dove or someplace in between, would have said, "not in my lifetime or in my children's lifetime," and now that looks different.

The other reason is that my technical intuition tells me not to have too much faith in technology. You will notice that we had some faith in the new technologies that first got us interested in SDI. X-ray lasers, chemical lasers, free electron lasers, and neutral particle beams. Notice that none of them—none, are in the current GPALS system.

I believe that, to the extent, that there will be an answer, a real answer, to damage limitation, it will lie in advanced technology, something that does move at the speed of light, probably from space. I believe it can eventually be done.

I share Richard's view that it is not as if offense will dominate forever. It is just that the technologies that I see now, that we might actually be able to build, simply aren't yet capable of overcoming the enormous head start that the offense has.

The CHAIRMAN. Richard, do you want to comment on any of this?

Mr. PERLE. Only that I think that you put it very well in looking at these two worlds. We are clearly in a transition from one to the other. I think we have probably arrived at World 2.

The most useful thing to come out of that should be a fresh look at concepts of defense without a lot of the ideological baggage that it attended in World 1.

Because I think that we have really prevented ourselves from exerting imagination in the application of defenses and looking for ways to achieve a better balance between offense and defense because of the concerns that we associate with that earlier world situation.

Now that that is passed, I hope there is a real assessment.

The CHAIRMAN. Gentlemen, thank you very much. It was a very, very interesting morning. I appreciate it. Thank you.

[Whereupon, at 12:02 p.m., the subcommittees and panel adjourned.]

PERFORMANCE OF HIGH-TECHNOLOGY EQUIPMENT IN OPERATION DESERT STORM

HOUSE OF REPRESENTATIVES, COMMITTEE ON ARMED SERVICES, PROCUREMENT AND MILITARY NUCLEAR SYSTEMS SUBCOMMITTEE, RESEARCH AND DEVELOPMENT SUBCOMMITTEE AND THE DEFENSE POLICY PANEL, *Washington, DC, Monday, April 22, 1991.*

The panel and subcommittees met, pursuant to call, at 10 a.m. in room 2118, Rayburn House Office Building, Hon. Les Aspin (chairman of the panel) presiding.

STATEMENT OF HON. LES ASPIN, A REPRESENTATIVE FROM WISCONSIN, CHAIRMAN, HOUSE ARMED SERVICES COMMITTEE

The CHAIRMAN. Our meeting will come to order this morning.

Let me just announce the subject of our hearings today, one of the most prominent themes in discussions of Operation Desert Storm's success has been the role of high technology weapons. Many systems faced their first real tests in the Gulf war.

Today the Procurement Subcommittee and the Research and Development Subcommittee join the Defense Policy Panel to review the results. This study is part of an effort to draw preliminary conclusions from Desert Storm that will help us provide a defense that works.

We know two things already. First, there has been a revolution in high tech weaponry. It has been underway for years, and its fruits were evident on the battlefield symbolized by precision munitions entering buildings exactly through windows and garage doors.

Second, we have learned how to make it work. High tech weapons alone don't do the job. The Iraqi Army had some very sophisticated equipment. But using it successfully requires a competent military whole.

Today we will inquire further into these two areas. We will identify and ask about the basic technologies that gave our weapons the edge. These include: remote targeting; precision delivery of munitions; night fighting capabilities; near-real simulators; computerized battle management; and built-in test equipment. How did they work? What benefit did they provide? What do they tell us about requirements for future systems?

Next we will explore the context in which high tech systems performed so well. Three factors proved critical in supporting these systems: maintenance; tactics; and logistics. How did they affect the use of high tech? Why were operational readiness rates in the field so high? What kinds of tactics did we use? What kind of tacti-

cal improvising was used? How did we cope with an extreme logistics burden?

We welcome as witnesses today three high tech experts: Jack Krings, the first director of the Pentagon's Office of Operational Testing and Evaluation; Pierre Sprey, former Special Assistant to the Assistant Secretary of Defense for Systems Analysis; and Bill Perry, Chairman of Technologies, Strategies and Alliances and former Under Secretary of Defense for Research and Engineering.

Gentlemen, thank you, and welcome to our hearing today.

We will do Krings and then Sprey and then Perry.

Jack, why don't you start?

STATEMENT OF HON. JOHN E. KRINGS, DIRECTOR, OFFICE OF OPERATIONAL TESTING AND EVALUATION, DEPARTMENT OF DEFENSE

Mr. KRINGS. Mr. Chairman, it is a pleasure to be here today for an assessment of Desert Storm, our recent successful military campaign.

Please enter my written statement for the record.

I would like to make a brief opening statement. I will be happy to answer questions during or after my statement.

Weapons performance in Desert Storm justified your authorizing the Department of Defense acquisition of high technology weapons during the last decade. Your consistent support of the volunteer, professional military force and the necessary combat-oriented training, proved to be both wise and life-saving. Why were we successful?

We applied a system approach to war. First, the leadership performed their correct function during the prosecution of war: leading, not managing. President Bush led the Nation rather than managing the campaign. Having a combat-experienced President surely helped.

Secretary Cheney contributed significantly by establishing policy and negotiating the critical role of the military operation. Dick Cheney functioned as minister of war, not a military commander. This responsibility was properly delegated to General Schwarzkopf by a most capable Chairman of the Joint Chiefs of Staff, Colin Powell.

He and the Secretary showed us the way the civilian secretary and the military chief should lead during a military operation. Hopefully, this precedent will establish the basis for any future conflict.

This is the first lesson learned. Second, the participants were volunteers, professionals, not conscripts.

Third, the force was highly trained operationally, not just technically.

Fourth, the command, control and communications and intelligence community was recognized, empowered, not second-guessed.

Fifth, transportation and logistics were based on combat requirements, customer need, not supply manuals.

Sixth, operationally tested effective and suitable high technology weapons were available, proven, not promised.

The success was not surprising. The swift dominance and rate of progress was totally unexpected. No one predicted the stupidity and incompetence of the Iraq military system. Our system approach can defeat any other more competent adversary. It would take longer at a higher price. A lesson learned and to be discussed later. I will focus my statement on the sixth contributor—operationally effective and suitable high technology weapons.

You and I, and others here, have often debated the value of many of these weapons systems, their potential capability and the emerging message from test results. Clearly your legislation, that empowered me as the Director of Operational Test and Evaluation from 1985 to 1989 contributed to the military victory and resulted in minimal casualties.

Remote targeting, identifying and designating the desired point of weapon impact, while remaining undetected or highly survivable, allows the use of smart weapons. The challenge has been to develop survivable, accurate targeting and designating capability.

In technical and operational tests, weaknesses are found, then overcome technically or dealt with tactically, or doctrinally, and the confidence in combat operational effectiveness and suitability is very high. Operational testing becomes both more necessary, and more valuable to insure weapons work before commitment to production.

Prudent concerns regarding the "fog of war" effect on weapons have been significantly reduced. "Fog of War" is really confusion caused by lack of information and coordination. A high technology force leverages this condition creating greater confusion—"fog of war"—for the enemy by surgically cutting his communication and exploiting our superior knowledge.

Availability is no longer just a mechanism to reduce cost. It is a necessity to succeed in a system approach. Recent significant investments to improve reliability and maintainability have sharply increased the cost of weapons but have dramatically increased their value. Most systems encountering delays in acquisition and particularly being denied going beyond low rate initial production have failed to achieve required availability rather than falling short of effectiveness.

Simulation contributes significantly to design, development, testing and training. Contemporary weapons design is done transparently by combat operators. Combat crews perform operational tasks in sophisticated simulators while engineers adjust designs to achieve mission success.

The LH and ATF have thousands of flying hours of simulated combat dedicated to designing performance, flying qualities and weapons displays and controls. The tail-less, flying wing B-2 is progressing very successfully through flight testing at an unprecedented rate, thanks to extensive simulation. Simulation is our most important tool. It has revolutionized requirement setting, design, engineering development, testing, training and tactic development. "Real" combat success is measured before the weapon is produced.

Training in sophisticated, operationally oriented simulators provides combat "artificial experience". Most target planning, C³ and non-visual operational tasks, can be trained for almost completely in simulation. A night stealthy or stand-off aircraft strike can be

made nearly identical to reality in a simulator. Just think how accurately a submarine mission can be simulated. Combat training at facilities like the Army National Training Center at Fort Irwin, Air Force Red Flag at Nellis in Las Vegas, and Navy Strike University at Fallon is a critical complement to simulation. Simulator artificial experience combined with real operations and exercises cumulatively approaches combat experience. The most valuable training for combat is combat.

Logistics has exploited technology to significantly improve the response time to the combat customers need by quickly finding the product and exploiting the transportation system. The transportation and logistics statistics of Desert Shield and Desert Storm are awesome. Air lift worked—and worked, and worked. Commercial transportation culture and resources contributed heavily. Operational suitability testing requires field testing of transportability and logistics support. It is major consideration in operational testing.

Why did our high technology weapons work? Because we designed and developed expensive, highly sophisticated, available weapons, invested heavily in the simulation and training to be able to use them, then tested them operationally for effectiveness and suitability, denying full production and fielding unless they proved combat capable—before deploying them with our volunteer-professional troops.

What have we learned? The high/low technology debate is over. We have never properly quantified the value of high technology over lower technology. Insights shown during testing of new systems suggest dramatic exchange and casualty ratios.

These results had very negative inferences to the survival of our large numbers of older systems. An even more important lesson and perhaps the most significant one is that there appear to be a strong correlation between the technology differential of the combating forces and casualties. This is most important. The message from the American public to the President was, Yes, we must go to free Kuwait. We want peace, but without losing American soldiers, not sacrifice for victory, but peace without casualties. Very large differentials in casualties appear to result from very large differentials in combat technology. Technology in all components of the system approach to war.

It is obvious that casualties have taken a much higher priority in military combat decision making. Clearly survivability is a most dominant consideration. This may be the most important positive lesson learned in Desert Storm and may cause a fundamental change in the prosecution of war in the future.

During past operational testing, political posturing, exacerbated by the press, emphasized the problems and exploited the weaknesses to provide opportunities for personal agendas. High technology expensive weapons success does not get votes or sell newspapers. But now everybody knows high technology works. It is far from perfect, but even farther from failure as publicly portrayed.

That teaches us the most important lesson. We must work harder, and spend wiser to do it better and better. Allies and adversaries both will seek high technology weapons requiring us to improve our technology even more. The Congress has thankfully

funded these winning technologies. Important congressional Members and staffers supported the responsible advocates, trusted the independent testers and funded the successful weapons. Continued congressional scrutiny, fair, but demanding is necessary. Prudent budget reductions can be expected, and are necessary, but we must be careful. Reduced threats could shift defense spending to political fat rather than combat muscle.

We are most fortunate. Visionaries in industry, government, military and Congress have begun a total dedication to survivability. The B-2, ATF, ACM, AX, and LH are very expensive commitments to increasing our high technology lead even more. It is a commitment to swift, absolute victory with minimum casualties. The least expensive approach to war.

PREPARED STATEMENT OF HON. JOHN E. KRINGS

During Desert Storm, the United States successfully applied a systems approach to war. There are at least six integrated components to this system.

First -- The leadership performed their correct function: leading, not managing. **Second** -- The participants were volunteers, professionals, not conscripts. **Third** -- The force was highly trained, operationally, not just technically. **Fourth** -- The capability of the command, control, communications and intelligence community was recognized, empowered, not second-guessed. **Fifth** -- Transportation and Logistics were based on combat requirements, customer need, not supply manuals. **Sixth** -- Operationally tested effective and suitable high technology weapons were available, proven, not promised.

The success was not surprising. The swift dominance and rate of progress was totally unexpected. No one predicted the stupidity and incompetence of the Iraq military system. Our system approach would and can defeat any other more competent adversary; it would take longer at a higher price. A lesson learned and to be discussed later. I will focus my statement on the sixth contributor -- operationally effective and suitable high technology weapons.

From the F-117 stealth attack aircraft to the chemical protective overgarment, our equipment performed as part of an expensive, technically sophisticated, complex system. Sensor systems as simple as a chemical agent detecting device to an infra-red imaging system or JSTARS, detects presence or change. This information is fused with information from other sources to provide knowledge. High rate, high confidence processing turns this knowledge into relevant facts and options to be displayed and acted upon.

Remote targeting, identifying and designating the desired point of weapon impact, while remaining undetected or highly survivable, allows the use of "smart weapons." Smart weapons very precisely hit targets designated (told where to impact) by complimentary systems, unlike "dumb weapons", that must be "aimed" precisely, correcting for gravity, wind, movement and trajectory. "Brilliant weapons" are sent to target areas and through sophisticated sensors and processing detect, classify and prioritize targets, designate them and attack them with the precision of smart weapons. The challenge has been to develop survivable, accurate targeting

and designating capability through strategic space sensor systems (space satellites), tactical airborne sensors (JSTARS, AWACS), stand-off sensors (A-6, F-111, F-15E, F-18, F-16 and Apache) or low observable direct attack systems (F-117, B-2). This activity is affected by natural (humidity, clouds, rain, sand/dust storms) and man-made (smoke products, jamming, chaff) environments. However, most of these environmental influences can be confidently tested and proven in technical and operational tests. Weaknesses are found, then overcome technically or dealt with tactically or doctrinally and the confidence in combat operational effectiveness and suitability is very high. Operational testing assumes the most capable adversaries of the future, when the new weapon is fielded in quantity, and tests against this level of threat. Operational testing becomes both more necessary and more valuable to insure weapons work before commitment to production.

Prudent concerns regarding the "fog of war" effects on weapons effectiveness have been somewhat reduced. Fog reduces visibility. Command, control, communications and intelligence increase visibility. Much of the previous "fog of war" was really confusion caused by lack of information and coordination -- not unlike trying to fly visually (low tech) in fog. Fully coupled, automatic (high technology) landings are done routinely in zero-zero conditions. Fog is not a technological impediment. The system approach to war significantly reduces the "fog of war." A high technology force leverages this condition creating greater confusion ("fog of war") for the enemy by exploiting superior knowledge.

Availability is no longer just a mechanism to reduce cost; it is a necessity to succeed in a system approach. Non-availability causes the system to fail -- a far greater loss than just the contribution of the specific sensor, command/control/communications (C3) device or weapon. Recent significant investments to improve reliability and maintainability have sharply increased the cost of weapons but have dramatically increased their value. Manpower intensive, lower technology redundancies can be eliminated. Reliability and maintainability, primary measures of operational suitability, have been the most prevalent source of failure during operational testing of new weapons. Most systems encountering delays in acquisition, and particularly being denied going beyond low rate initial production, have failed to achieve required availability rather than falling short of effectiveness.

Simulation contributes significantly to design, development, testing and training. From very expensive large force on force exercises and operational tests to desk-top personal computer video "games", simulation allows us to focus all design, development and training efforts on combat success -- the real goal. Contemporary weapons design is done transparently by combat operators. Combat crews perform operational tasks in sophisticated simulators while engineers adjust designs to achieve mission success. Simulators measure battlefield success in combat scenarios to select optimum design parameters. The LH and ATF have

thousands of flying hours in simulated combat dedicated to designing performance, flying qualities and weapons displays and controls. The F-15, F-16, F-18 and other systems used in Desert Storm were designed, developed and tested in sophisticated operational simulators. The tailless, flying wing B-2 is progressing through flight testing at an unprecedented rate, thanks to extensive simulation. Through simulation, the ATF prototypes were more mature than prior programs. Real tests verify, establish confidence and discover errors in simulation to improve the proper use of this vital tool. Through simulated systems, we design, develop, test and select the best target planning, sensor, C3 attack platforms and weapons to provide a system approach to war fighting. Simulation has revolutionized requirement setting, design, engineering development testing, training and tactic development. "Real" combat success is measured before the weapon is produced.

Training in sophisticated, operationally oriented simulators that are integrated with target planning, C3 and logistics simulators and models provides combat "artificial experience." Force on force exercises, while extremely expensive, are the compliment to simulators. Most target planning, C3 and non-visual tasks can be trained for almost completely in simulation. A night stealthy or stand-off aircraft strike can be made nearly identical to reality in a simulator, including anti-aircraft artillery and surface to air missiles (SAM). Forces encountered during SAM avoidance maneuvers cannot be properly simulated, however, night instrument flight reduces maneuvering activity and mitigates this limitation. While true apprehension and fear (and the effects on human performance) cannot be well simulated, everything else is communicated to the crew through display and control systems where procedures are the same. Apprehension and fear during actual combat is reduced by familiarity with the procedures – and confidence in the capabilities of the system. The adverse environment can be very properly included. Just think how accurately a submarine mission can be simulated. Tank operation at night, while "buttoned up" during daylight, is readily simulated to include forces normally encountered. Planning, targeting C3, air defense, and all stand-off/remote attack is readily simulated. This artificial experience combined with real operations and exercises cumulatively approaches combat experience. The most welcome news to the engineering team during my first flight of the F-18 was when I said "it flies just like the simulator!"

Logistics has exploited technology to significantly improve the response time to communicate the combat customers need, find the product and exploit the transportation systems. Quick, accurate logistics response (after initial deployment) exploits critical airlift capacity. Technologically smart interpretation of the combat customer's needs dramatically reduced the historically typical "supply corps" shipping "by the book." Commercial transportation culture and resources contributed heavily. Operational suitability testing requires field testing of transportability and logistics support. Operational suitability requirements have

played a significant role in recent decisions to remain in low rate production or begin full rate production.

Why did our high technology weapons work? Because we designed and developed expensive, highly sophisticated, available weapons, invested heavily in the simulation and training to be able to use them, then tested them operationally for effectiveness and suitability denying full production and fielding unless they proved combat capable -- before deploying them with our volunteer-professional troops.

What have we learned? One important lesson: expensive, high technology weapons, rigorously tested before production and fielding is the best investment for our professional warriors. The high/low technology debate is over. Operational requirements dictate operational tests against projected threat capability -- testing is not done against past, current or degraded threats. Operational training like that conducted at the Army National Training Center, the Air Force Red Flag exercises and the Navy "Top Gun" school reflects the most capable adversary anticipated. We have never properly quantified the value of high technology over lower technology. Insights shown during testing of new systems suggest dramatic exchange and casualty ratios but had very negative inferences to the survival of our large numbers of older systems. An even more important lesson and perhaps the most significant one is that there appears to be a correlation between the technology differential of the combatting forces and casualties. This is most important. The message from the American public to the President was, "Yes, we must go to free Kuwait. We want peace but without losing American soldiers; not sacrifice for victory but peace without casualties. The emerging results suggest that the best approach to this subtle mandate is higher and higher technology to provide greater and greater superiority in combat technology, thereby fulfilling both requirements: swift, survivable attack creating the "fog of war" for the enemy achieving air superiority while enabling our less survivable weapons systems to attack without casualties. **Very large differentials in casualties appear to result from very large differentials in combat technology.** This observation provides a uniquely strong motive for even more aggressive improvement in weapons technology. A total reevaluation of cost versus value must be made to emphasize survivability which has previously been measured by reduction of available systems to execute campaign plans. Casualties were not taken lightly but no measurable cost was assigned.

It is obvious that casualties have taken a much higher priority in military combat decision making. Assigning a fair cost to casualties in determining life cycle cost may show how much high technology really contributes. Air campaign costs versus ground campaign casualties creates new trade-offs. **Clearly survivability is a most dominant consideration; this may be the most important positive lesson learned in Desert Storm and may cause a fundamental change in the prosecution of war in the future.**

During past operational testing, political posturing exacerbated by the press emphasized the problems and exploited the weaknesses to provide opportunities for personal agendas. High technology expensive weapons success does not get votes or sell newspapers. But now everybody knows high technology works! It is far from perfect but even farther from failure as publicly portrayed. That teaches us the most important lesson. We must work harder, and spend wiser to do it better and better. Allies and adversaries both will seek high technology weapons requiring us to improve our technology even more. The Congress has thankfully funded these winning technologies. Important Congressional members and staffers supported the responsible advocates, trusted the independent testers and funded the successful weapons. Continued Congressional scrutiny, fair, but demanding is necessary. Prudent budget reductions can be expected, and are necessary, but we must be careful. Reduced threats could shift defense spending to political fat rather than combat muscle.

Now that we have successfully deployed the system approach to war, we must recognize that the system capability is the product, not the sum, of the elements. As a multiplier, each element must be equally supported. Investment and budgeting must reflect the leveraged approach we are taking and insure a balanced defense system.

The CHAIRMAN. Pierre next.

STATEMENT OF PIERRE SPREY, FORMER SPECIAL ASSISTANT TO THE ASSISTANT SECRETARY OF DEFENSE FOR SYSTEMS ANALYSIS

Mr. SPREY. Chairman Aspin and members of the committee, I would like to thank you very much for inviting me here.

Let me start by speaking as a technologist myself, and trying to place the role of technology in perspective. It is very important not to exaggerate the impact of technology. I think the single-most telling comment came from General Schwarzkopf in an interview, when he said this: if he had exchanged equipment with the enemy, simply changed out American equipment for Iraqi equipment, the outcome of the war would have been exactly the same.

I think it is very important to keep that in mind. There are things that come ahead of technology, and the things that really dominate the outcome of war are people, the quality of people you have, their character, and their leadership, and the ideas they have.

From that point of view, I think the single most significant development of this war lies in the realm of ideas. That development is that the ideas of Col. John Boyd, the brilliant ideas on maneuver warfare were, in fact, adopted, and shaped General Schwarzkopf's very innovative and prescient campaign plan. That is a great step forward for American forces.

So taking that kind of modest view about the role of technology, let me say I don't propose here to compare the combat results for high and low technology. In fact, I don't understand what the definition of high and low technology is, and I don't understand how to make that distinction useful.

I am going to talk about a sample of weapons that were not previously tested in combat and for which we have some idea what the results were.

The weapons I am interested in, I will use as examples, are specifically the Patriot, the A-10, the Tomahawk, the Stealth and the AV-8B. In this brief statement I will talk about two or three of those.

First of all, it is very important to understand none of these are really new technology. The newest of them, the Tomahawk and the Stealth, were fully started over 13 years ago. The oldest of them, the Patriot, is truly long in tooth. It was started in the mid-fifties. It is really an ancient system.

Let me say right upfront, that my purpose in talking about these is not to settle for all time exactly what worked and what didn't. What I would really like to do is convince the committee of three points that I think are of great importance.

The first is that combat data and experience are valuable, almost beyond price and beyond conceiving. They are particularly crucial to the Congress in making the decisions of the next few years as we reshape the Defense budget and the Defense forces.

The second point that I would like to convince you of is that the country has been very poorly served by the shamelessly doctored

statistics and the hand-selected, tiny number of super success story videos that were shown on the evening news all through the war.

The third thing that I would like to present is that if, in fact, the committee wants the benefit of these priceless data and the experience that came out of the war, then it is going to have to do something to make sure that these data are preserved, collected, analyzed, rather than mangled and censored and distorted by people who are grinding procurement and budget axes.

To that end, what I would like to urge you to think about is the possibility of establishing one, or possibly two or three, independent groups of very distinguished and really independent scholars, scientists, and experts to review these priceless data we have been talking about, and to make sure the lessons don't get lost.

Having said that, let me touch very briefly on a couple of weapons systems to illustrate those points I just made.

The first, and in a way a paradigm of how badly we have been informed about the war, is the Patriot. As you know, there was unending news and propaganda about the Patriot scoring 45 out of 47 successes against the Scud.

The committee, I think, has already investigated that subject and so I won't belabor it, but very briefly it now appears that the facts are a little different. It appears, first of all, that for the 47 Scuds that were fired inside Patriot coverage, it took 158 Patriots to even attack them.

Second, very few of what were quoted as successfully intercepted Scuds actually were destroyed in mid air. The vast majority of them, in fact, fell into the target area, exploded and some caused damage.

Last, perhaps most important, is that sizeable numbers of Patriots, some of them fired at actual Scuds, some of them fired at pieces of debris, some of them fired at totally false targets, came down and exploded in the target area and added to the casualties and damage of the people who were being defended.

It now appears, based on Israeli sources—of course, all of this has to be checked very carefully—it now appears based on Israeli sources, that only one of 24 incoming Scuds was actually exploded in mid-air. For the rest, maybe four or five Scuds supposedly were successfully intercepted in the sense—and this is a very odd sense—that allegedly the Patriot deflected the Scud's trajectory, that is, kind of pushed them out of the target area. A claimed success of this sort is a real judgment call and something that needs to be reviewed.

Because, as you know, the Scud on re-entry sort of breaks up and this, in itself, deflects the trajectory. So it is very easy to claim a success for the Patriot when it might have been, in fact, the Scud breakup deflecting its own trajectory.

The worst news of all is the tabulated data that you have no doubt seen published in the *Wall Street Journal* and I think was discussed here at the committee. The bad news is that the difference in damage per Scud fired at the Israeli defended area before and after the actual use of Patriot is startling. The casualties per Scud after the Patriot went into operation were 80 percent higher than they were before the Patriot was being fired.

The damage per Scud, the number of apartments damaged per Scud, after the Patriot was brought in to play was 400 percent higher than before there was a Patriot. This is a little different than what we were getting on the TV evening news and I think, given that the taxpayers have already spent \$15 billion or so on the Patriot, the committee has a right to demand a shot-by-shot account of every shot of the Patriot, every false alarm, every Patriot missile that fell to the ground and added to the damage of the Scud.

The second example that I would like to talk about is the A-10, that is kind of the opposite story. That is in a lot of quarters, that is an unexpected success story.

A very brief background, General Horner and the U.S. Air Force initially did not want to deploy any A-10 anti-tank airplanes to the theater for old and historical reasons dating back to the inception of the A-10. Basically, most of the Air Force is uninterested in the close support mission. It is a low priority mission and particularly they dislike the A-10 because it is low, ugly, cheap, and doing a mission, of course, that is not of great interest to high ranking Air Force officers.

Also, there is almost a universal belief then and now in the Air Force that any airplane that cannot do 500 knots plus cannot possibly survive the ground defenses of any modern army.

Well, the results of the war on this subject were extraordinarily interesting and I think extraordinarily important for anybody interested in the close support mission. First of all, I think overall, of all the factors involved in the air campaign, the A-10 success story proved to be the single-most important from a military effect point of view.

The A-10 had a larger effect on the outcome of the air campaign probably than any other single technology in the war, and the big surprise proved to be that the survival—the really unprecedented survival technology incorporated in the airframe—things that have never been done to any airplane before to make it survive, to make it able to absorb hits and keep on flying and protect the pilot—those things proved to work.

The A-10 was by a fair margin the most survivable airplane in the theater. In fact, it was the only airplane that was able to fly at fairly low altitudes and actually search for real tactical targets across the battlefield. The 500 knot jets, in general, were restricted to flying 8000 feet and above by the theater command. That made it very, very difficult for them to find targets like trucks and artillery pieces, Scud launchers and so on.

Only the A-10 could get down in the dust and dirt of the airfield, find those targets and stay around long enough to do something about it. The results were quite striking. Using what amounts to about 7 percent of the total air assets force—there were only 144 A-10s—the A-10 accounted for 1000 of the 1700 tank kills that were claimed by the air campaign up to the point the ground invasion began.

It actually accounted for 1200 of the 1300 artillery kills that were claimed.

Perhaps even more surprising to the traditional interdiction bombing enthusiasts in the Air Force was the fact the A-10 domi-

nated the classical interdiction mission, not just the close support mission for which, of course, it had been designed. In fact, it did the lion's share of the interdiction work patrolling the road networks and also searching for Scud launchers. Why was the lion's share of that work done by the A-10? For very simple reasons, because the 500 knot jets were too tender, too thin-skinned, to put in time over those roads. Those roads all had defenses and guns and what-not.

As I mentioned before, the 500 knot jets were restricted to 8000 feet and above. That makes it too tough to find and hit trucks and convoys and trains and camouflaged supply dumps.

Last, we found some very interesting things from the POW interviews and that was it didn't take very long to establish that, by far the most feared airplane over the battlefield was the A-10, and for very simple and obvious reasons. As the prisoners said, the other planes kind of hit and ran, they were there then they were gone. The A-10 came, stayed, searched them out and then had this deadly 30 millimeter canon that could dig them out of entrenchments and out of their tanks and out of their vehicles.

It is interesting and a great tribute to General Horner's objectivity and his courage and his dedication to combat that, after observing this surprising turn of events with the A-10, he very publicly admitted he had been wrong in his judgment about the A-10. In rather colorful language, he said it saved his air campaign.

The air staff has not come off the old views. They still say they want to retire the A-10, junk it. They still think the A-16—a cobbled up, Band-aided F-16—is the way to meet the Air Force's close support obligations. I think it should be clear to the committee how important it would be to have a really well-documented account of what really happened in those A-10 operations before going along with plans to junk the A-10.

I think these lessons are of extraordinary importance to the force structure of the country for the next few years.

The last weapons system that I will discuss very briefly here is the Stealth. That is a very interesting case because it has a lot of ramifications.

The CHAIRMAN. Why don't you discuss all of the six. I read your statement last night, but I think it would be important for the members if you would discuss all of the weapons you were talking about. I would like also to get the reaction of the other witnesses to your characterizations of these.

So, go ahead.

Mr. SPREY. Sure. OK. Another of the weapons that had never been deployed in combat before and for which we were very interested to see what the combat outcomes would be was the Tomahawk cruise missile.

We fired almost \$500 million worth of Tomahawks in the campaign. So far, the only accounting of what happened is in a classified study done by an agency of the service that bought the Tomahawk. My guess is that unless this committee does something about it, it never will be an independent and outside shot-by-shot accounting of the Tomahawks and what they have achieved.

I think there is great need for such an accounting, and I base that feeling on the eyewitness observations of journalists in Baghdad who actually saw the Tomahawk flying and saw the effects.

This evidence is purely anecdotal, and it doesn't prove anything except to say we need that shot-by-shot accounting. To people in the streets of Baghdad, the Tomahawk looked like an awfully easy target to shoot down.

It is pretty slow. It is very visible, and it flies in a absolutely straight line. That makes the Tomahawk a real sitting duck. I might point out there was a very similar target in World War II called the V-1 buzz bomb, and U.S. anti-aircraft managed to shoot down 90 percent of these.

You can see why there is reason to be concerned. In fact, foreign reporters said they saw several being shot down.

Second, there has always been a question—this came out very clearly during the operational tests of the Tomahawk, tests that the GAO found to be grossly unrealistic, that the Tomahawk guidance would easily get lost in terrain that was too featureless, too flat. Remember, it depends on a navigation system that matches the contour map stored in memory against the contour of the terrain it observes with its radar altimeter.

Also, Tomahawk has terminal guidance, an optical scene matching system that is rather easily defeated by smoke or camouflage, since it is based on a TV image.

These are all questions that have been raised—but not answered—long ago during the Tomahawk operational tests, and even before.

These questions would seem to be justified, because observers in Baghdad saw a number of Tomahawks hit completely militarily irrelevant targets, apartment buildings and other kinds of innocuous targets—apparently as a result of misnavigation by the Tomahawk's guidance.

In fact, one observer who is the brother of a friend of mine, saw where a Tomahawk had blown up a swimming pool. There is ample reason to believe Tomahawks get lost. Overall, there is nothing I can conclude, since this is anecdotal evidence.

However, we should remember that there were only 200 or so Tomahawks fired out of a good deal more than 10,000 guided missiles fired. So, the one thing you can say with some confidence is that the 200 Tomahawks couldn't have had a very dominant effect on the outcome of anything.

The next weapon I would like to talk about is the Stealth. Of course, I don't need to underscore that its success or failure has tremendous ramifications for a lot of procurement programs, including B-2 and ATF and AX and on and on.

First of all, it appears, based on a number of reports back from the theater, the Stealth is probably not stealthy. We have recurring reports of French, Chinese and British radars tracking the Stealth without problem.

It also appears—though I don't want to go into this any more unless we have a closed session—it also appears the people most convinced of the fact that the Stealth was being easily tracked were the Stealth pilots. None of that should be surprising to any-

body who has ever read the chapter in the standard radar handbooks on the physics of radar reflectivity.

There is every reason to believe, in fact, that stealth technology does not protect the Stealth from radars at most aspect angles.

The second observation from the combat experience with the Stealth, is that it appears the payload range was pretty limited. As everybody knows by now, the Stealth was widely used to attack targets in Baghdad. The open, in-the-clear radio traffic showed very clearly that the first thing that Stealth pilots were worrying about as they came off the targets in Baghdad was their fuel status.

There was more cockpit chatter about fuel problems than any other airplane in the theater. It appears Baghdad was more or less at the limits of the payload-range capabilities of the Stealth airplane.

Again, that shouldn't be surprising. All you have to do is look at a photograph of the Stealth and know something about aerodynamics to realize that the F-117 has an awfully high drag shape.

The last point, kind of on the opposite side, is, quite unexpectedly, the Stealth air-to-ground electronics—nothing especially classified here, just the electronics used on the Stealth for launching the LGB—worked very well, substantially better than similar electronics in other fighters. These electronics were a real plus for the Stealth's ability to launch LGBs.

I think it is clear, based on the recurrence of reports from radar operators, that the Stealth was easy to track. The committee needs to demand the relevant combat evidence and the intelligence that could absolutely confirm or deny whether the Stealth was easy to track.

If it is confirmed that Stealth is indeed visible to radar, then I think a number of things need doing. First, I really think it would be important to investigate how all this got covered up. For all those years the program was being funded, we got told the Stealth was stealthy, when in fact it was awfully easy to take a real flying prototype and test it with real radars, and see whether radars tracked it or not.

Of course, the corollary to that is, if we did those tests and knew ahead of time the Stealth wasn't stealthy, why were those pilot's lives risked in combat in that fashion?

There is a second action needed if it turns out the Stealth is not stealthy. It would be a most important precedent to cancel the special security status of Stealth: black programs, black security clearances have been grossly abused, mostly to avoid oversight rather than limit the release of damaging information to enemies. I think that trend needs to be reversed.

The implications for the B-2 are pretty obvious. If a little airplane like the Stealth can't be made invisible to radar, there is very, very little hope a huge bomber like the B-2 will be effectively invisible to radar. I cannot see how one can avoid cancelling the B-2 if that is so.

The next weapon that I would like to talk about very briefly, because there is not enough said about it, is the AV-8B Harrier. It is clear that the Harrier was a major disappointment.

We have known for a long time the endurance and loiter of the airplane were far too short to search for close support or interdic-

tion targets; combat confirmed that. Even more important, combat in the Gulf showed us that the survivability of the airplane was not only poor, but substantially poorer than the rest of the thin-skinned 500-knot jets. The loss rate among the Harriers were quite appalling. There were only 60 Harriers in the theater, and six of them were lost. That is a loss rate almost as bad as the British Tornados suffered. Five of those were combat losses, not accidents.

That leaves the Marine Corps with a terrific close support deficiency. The last thing I would like to talk about briefly is a subject of great importance, but one where I think our insights from combat will be limited. That is the subject of the ground weapons, particularly these armor and antiarmor weapons we have never tested in combat before. These weapons are right at the heart of our entire ground force.

We have not tested the M-1 or the M-2 in combat. The anti-tank weapons have never really faced a real tank enemy. Here the important weapons are the Dragon, the Tow and the AT-4.

Fortunately, the ground war turned out to be extremely brief, and the opposition turned out to be very light, perhaps sporadic or, in a lot of cases, nonexistent. That does cause a problem in deriving profound insights on how these ground weapons worked.

You simply cannot evaluate the effectiveness of a Tow missile against an enemy that didn't want to fight. The same for the M-1 tank. On the other hand, there is some valuable data out there, and we need to gather what is there.

The M-1 and M-2 made some forced marches of surprising speed and length and apparently did well. We need to collect that data on how well they operated through those forced marches.

They were hit a few times, not many times. The M-1 apparently did pretty well when hit.

The M-2 had a few catastrophic casualty problems. We need to gather every one of those incidents and understand the survivability and crew casualties in those vehicles that were hit. Although there were very few firings of Dragon, Tow and AT-4, we need to collect those and do conclude something about the reliability of the weapons.

That pretty much covers my sample of the new weapons of the war, the weapons of the Gulf War that had not been tested in previous combat.

I would like to make one comment on some relatively old weapons, that is the laser guided bombs, LGBs. We have used LGBs in four previous conflicts. There is no real news on how well LGBs worked in this war, although several models of the LGBs used in the Gulf were newer. There were some models used that weren't used in Libya. From previous wars, we already knew that the hit percentages of LGBs were not real impressive. I did an analysis of about 200 combat drops in Vietnam, and we concluded we only got about 30 or 40 percent hits on very large area targets. These were not hits on very small, pinpoint, hard-to-hit targets. These targets were in the nature of road intersections and all we got was 30 or 40 percent hits. The 60 or 70 percent misses that we had tended to be misses by thousands of feet. That, of course, instantly ruled out laser-guided bombs as in any way usable in close support.

The GAO found results in Libya slightly poorer than what I found in Vietnam. In fact, this was surprising to me—they found the actual percent hits for LGBs in Libya, again on big, easy targets, not on pinpoint targets, was actually a little worse than the equivalent percent hits for iron, unguided bombs.

Now, in the Gulf, of course, we don't have that kind of accounting yet, although I think we certainly have the bomb damage assessment to be able to put one together. We do have some clue of the performance of the LGBs, based on some very interesting sortie numbers that General Schwarzkopf put out in the January 30th briefing from the theater.

If you look at the sorties allotted to bridges in that briefing, you can see very quickly that it took 24 sorties to get a hit on a bridge. There were 790 sorties allocated, and 33 out of 37 bridges attacked were hit.

That means it took about 24 sorties to get a hit on a bridge.

Interestingly enough, early the next week, an RAF officer pointed out that not all those bridges that were hit were destroyed, in fact only about a third of them were destroyed. That means it took 72 sorties to get one destroyed bridge. That is a success rate, not of 85 percent, the classic number, but under 1.5 percent. One and a half percent is not a startling success story, to say the least.

This really points out just how shameless the censoring of the results for the guided weapons was during the war. You remember seeing over and over again the same targets being blown up by the same missile. It looks like, for every missile that blew up a bridge, there were maybe 70 or 75 misses that nobody was showing.

Mr. SPREY. Overall, let me say that none of what I have said is meant to definitively settle what worked and what didn't work. What I am really trying to do is bring home to the committee that these data are of extraordinary importance and that there are extraordinarily important lessons waiting to be learned.

Second, those lessons don't look anything like what you saw on TV. The very shallow, tendentious picture of the Nintendo war that we got from the TV coverage was false and not useful in making future defense decisions.

Third, if the Congress wants the benefit of those important lessons that are waiting to be learned, something needs to be done.

We can't leave the gathering of those lessons to the procurement advocates and the budget propagandists, so I would like to urge the committee to very seriously consider Franklin Spinney's published proposal to commission a new Strategic Bombing Survey.

As you probably all know, the Strategic Bombing Survey was a brilliant, comprehensive, 70-volume study of the results of the bombing campaign in World War II. It was done by some of the most distinguished scholars of that day, including Mr. Nitze, and I believe Mr. Galbraith and Mr. Schlesinger. So I would like to urge the committee to consider the possibility of setting up exactly such a survey, preferably to set up two or three groups to very seriously gather all the evidence available—to bring together unimpeachable and independent, qualified scholars, scientists and experts to collect those data, analyze them, and draw lessons for the benefit of the Congress and the Nation. I reiterate, those data and those lessons are absolutely priceless.

They were bought with the blood of our troops and our pilots, and if we don't do something, those data and that experience will be squandered. Thank you.

PREPARED STATEMENT OF PIERRE SPREY

I wish to thank Chairman Aspin and the members of the Committee for inviting me to testify concerning weapons technology in the recent Persian Gulf war.

Let me begin by placing the role of technology in perspective. As General Schwartzkopf recently stated, if we had exchanged equipment with the enemy, the outcome would have been the same. Why? Because people and ideas are much more important in war than hardware. And by far the most significant development of this war is the widespread adoption of the maneuver warfare ideas of Col. John Boyd, as reflected in the innovative, precedent-shattering campaign plan of General Schwartzkopf and his staff.

Speaking from that moderate view on the role of technology, I do not propose to compare the combat results for high versus low technology, simply because I know of no way to make that distinction meaningful or useful. Instead, I will comment on the little we know at this point concerning the results for a small number of salient weapons which had not been combat-tested in previous wars. These include the Patriot, the A-10, the Tomahawk, the Stealth and the AV-8B. None of these can be thought of as new technology, since the newest, the Tomahawk and the Stealth, were started over 13 years ago. Indeed, the Patriot, the oldest of the lot, is really long in the tooth having been started in the late fifties as the Tactical Anti-Ballistic Missile System (T&BM).

My purpose in commenting on these half dozen weapon systems is not to settle which ones worked and which ones didn't. Instead, I wish to convince you of three points of major importance:

- o Combat data and experience, objectively reported and analyzed, is of inestimable importance in shaping and improving the defense of the nation -- and is particularly crucial to the Congress in making decisions concerning the inevitably shrinking defense budget.
- o The country has been poorly served by the shamelessly doctored statistics and the hand-selected video clips of isolated successes that were pumped out to the media during the war in order to influence post-war budget decisions.
- o If the the HASC wants the benefits of the priceless insights available from the Desert Storm combat data, then it must take active measures to make sure that data is not distorted, censored or buried by procurement advocates grinding their budget axes. Specifically, the HASC needs to sponsor at least one -- preferably several -- groups of thoroughly independent scholars and analysts to interview combat participants and to compile, review and analyze the data of the war itself to draw the lessons that will help the Congress make the crucial defense decisions of the next few years.

PATRIOT

During the war, the media gave unquestioning coverage to the Raytheon/Army claim that the Patriot "successfully intercepted" 45 out of 47 incoming Scuds.

It now appears that;

- o 158 Patriots were fired at the 47 Scuds within Patriot coverage.
- o Very few of the "successfully intercepted" Scud warheads were prevented from successfully impacting the ground and exploding.
- o Numbers of Patriots, some fired at real Scuds and some fired at radar false alarms, came down and exploded within the defended area, thereby adding to the casualties and damage caused by the Scud.

The new evidence comes mainly from the Patriot operations in Israel, where disagreement between Israeli and American operators has allowed some uncensored information to leak out. The Israeli sources are alleging that only one Scud warhead was actually destroyed in midair and that less than 20% were deflected off course 'sufficiently' to land outside the defended area (the 'sufficiently' is a judgment call that in itself needs checking since the break-up of the Scud missile body on re-entry causes deflection of the trajectory on its own without any help from intercepting Patriot warheads).

The casualty and damage data for Scud with and without Patriot defenses will be easier to verify than the under-20% success rate. The currently published figures show that Israeli casualties per Scud fired increased by 80% after the Patriots started defending Israel. The number of apartments damaged per Scud fired increased by 400%. No one has yet published the number of Patriots that fell on defended territory and directly caused added casualties and extra damage. One reliable eyewitness saw 4 Patriots hit Tel Aviv in one night; films of the 4 impacts are here in Washington.

Given that the taxpayer has already spent nearly \$15 billion on Patriot, I think it would not be unreasonable for the Congress to demand a shot-by-shot accounting of Patriot versus Scud encounters, including full successes, deflections of Scud trajectories, failures, misfires, firings at false targets and numbers of Patriots exploding on the ground.

A-10 ANTITANK AIRCRAFT

Initially, the USAF and General Hoerner resisted deploying any A-10s in support of Desert Shield. Only the combined pressure of General Schwartzkopf and higher authorities forced the USAF to offer up 144 A-10s, still less than 10% of the combat aircraft in-theater. Air Force brass hostility to the A-10 has continued unabated since the A-10 concept's founding in 1968. Then and now, that hostility has stemmed from a) a dislike of the close support mission (i.e., a non-independent mission against targets selected by another Service); and b) an unshakeable belief that only speed (500 knots plus),

helief

not maneuverability or airframe ruggedness, could ensure survival against serious ground defenses.

Although we have nothing approaching complete documentation of A-10 operations in the Gulf, the current evidence makes it clear that the A-10 may be, militarily, the most important technology success story of the air war:

- o The A-10 proved to be the most survivable airplane in the theater, significantly more survivable than any of the thin-skinned, 500 knot fighters. Simple gun defenses defeated the 500 knot fighters' ability to search for tactical targets; the theater command forbade them to fly below 8000 feet to keep losses down. The A-10 was the only aircraft capable of target-hunting at low altitudes for extended periods of time with only light losses -- a result of its unprecedented survival technology.
- o With only 144 of the 1800 combat aircraft flying, the A-10 force accounted for 1000 of the 1700 tank kills claimed during the air campaign. It accounted for 1200 of the 1300 artillery pieces claimed as air kills before the ground war.
- o The greatest surprise to USAF traditionalists was the A-10's dominance of the classical interdiction mission. It accomplished the lion's share of road interdiction and Scud launcher hunting. The bulk of truck and supply convoy destruction on the road network supplying the Kuwaiti theater was accomplished by A-10s because the 500 knot jets had neither the fuel nor the survivability to patrol the road network.
- o POW interviews quickly established that the A-10 was the airplane most feared by Iraqi soldiers. They feared it because a) it stayed long and low over the battlefield instead of hitting and running like the 500 knot fighters; and b) the 30mm cannon with its incendiary uranium armor-piercing rounds was devastating.

It is a tribute to General Hoerner's character and dedication to combat that he informed both his staff and higher headquarters that he was wrong about the A-10 and that it "saved" his campaign.

In the meanwhile, the Air Staff is still trying to retire all the active A-10s and to persuade the Congress to fund the A-16, an F-16 with a few survivability band-aids, in order to put up a pretense of fulfilling the USAF's close support obligations.

The value to the Congress of an independent, cleanly-documented account of A-10 combat experience in the Gulf could not be clearer.

TOMAHAWK

We fired nearly a half-billion dollars worth of Tomahawks during the Gulf war. To date, the only accounting available is an optimistic classified study by a Navy agency. An independent, shot-by-shot accounting is unlikely to ever be undertaken without outside stimulus.

The anecdotal evidence from foreign observers in Bagdad underscores the need for such an accounting -- and lends credence to some of the criticisms voiced during the highly inadequate operational tests of the Tomahawk:

- o The Tomahawk, flying a low, slow, visible and easy-to-hit straight path, looked like a made-to-order target for the lightest machine guns. Several were seen to be shot down.
- o The Tomahawk's terrain map-matching navigation system is vulnerable to getting lost in terrain that is either too featureless or too craggy; the optical scene-matching terminal guidance can be defeated by smoke or camouflage. Observers witnessed several Tomahawks crashing into militarily-irrelevant apartment buildings.

Whether these few incidents are representative or anomalous must await the results of the independent, shot-by-shot accounting.

The only overall comment we can make now is that, out of the 10,000 plus guided weapons fired during the war, the 200 or so Tomahawks cannot have had a dominant impact.

STEALTH

Despite the special security classification of the Stealth program, some insights concerning the combat performance of the F-117 are available:

- o The Stealth does not appear to be stealthy. It appears that a widevariety of ordinary search radars, French, Chinese and British, had no trouble tracking the F-117. It also appears that the F-117 pilots were more convinced of this than anyone. None of this is surprising to anyone who has looked at the physics of radar target reflectivity, as described in any standard radar textbook.
- o F-117 payload range capabilities are quite limited. The fuel status of F-117s attacking bagdad was clearly marginal, based on radio traffic from F-117 pilots coming off their targets in and around Bagdad. Again, this is not surprising to anyone with an understanding of the aerodynamic consequences of the stealth-compromised, high drag shape of the F-117.
- o Unexpectedly, it appears that the F-117 electronics (no special

stealth classification) for launching laser guided bombs performed unusually well and showed real advantages over the competing electronics in other fighters.

The HASC can certainly demand the relevant combat evidence and intelligence to determine whether the Stealth was or was not easy to track on radar. If its visibility to radar is confirmed, then several actions need to be considered:

- o Investigation of how the facts of Stealth vulnerability were covered up and why F-117 pilots' lives were needlessly risked in combat.
- o Cancellation of the special security status of the Stealth program, which has always been used more to prevent oversight than to protect national security-endangering information.
- o Cancellation of the B-2.

AV-8B

The AV-8B appears to have been a major disappointment. As has been known for a long time endurance and loiter were very short, too short to permit searching for tactical targets. But survivability in the Gulf proved to be considerably worse than the standard thin-skinned 500 knot jets, with 6 AV-8B's lost out of the small force of 60 on hand.

This leaves the USMC with a very serious deficiency in close support aircraft.

GROUND WEAPONS

The combat insights available regarding the crucially-important, untried-in-tank-combat ground weapons -- for instance, the M-1, M-2, Dragon, TOW and AT-4 -- will necessarily be much more limited than the combat results for the air war. After all, there were only a few days of ground war. The enemy was deserting and fleeing even before the ground attack began. Only sporadic resistance could be found, a setting that makes impossible a comprehensive evaluation of the combat effectiveness of these weapons in the face of serious opposition.

Nevertheless, there is some valuable combat data that needs to be retrieved and analyzed, particularly regarding:

- o The reliability and mobility of the M-1 and M-2 during the opening maneuvers.
- o The vulnerability and resulting crew casualties from the few hits registered on the M-1 and M-2.

- o The reliability of Dragon, TOW and AT-4 from the relatively limited sample of firings that took place.

LASER GUIDED BOMBS

The LGB is, of course, old technology that has already been used in four wars: Vietnam, Libya, Grenada and Panama. We already have a fair picture of how well they work in combat.

For Vietnam data, I analyzed a detailed data base of 200 LGB combat drops and found that "hits" -- even on relatively large area targets such as road intersections -- were in the area of 30% to 40% with the 60% to 70% misses tending towards the thousands of feet. GAO found similar, slightly worse results for Libya: the LGBs there actually had fewer percent "hits" -- again, defined against relatively large area targets -- than the un-guided iron bombs.

In the Gulf, the percent successes for LGBs against bridges -- a target much smaller and harder than the above area targets-- appear to have been very substantially lower. The best currently available evidence comes from General Schwartzkopf's briefing of January 30th. Using his numbers, 24 sorties were needed to get one hit on a bridge. Early the next week, an RAF officer pointed out that only one third of the 33 bridges hit in General Schwartzkopf's briefing were actually destroyed. Thus, it took 72 attack sorties to destroy one bridge. This is equivalent to a success rate of less than 1 1/3%, somewhat less than the widely-touted 85% -- and a measure of just how highly-selected the famous bridge-busting video clips shown on TV news were.

CONCLUDING REMARKS

The above comments were not meant to settle the question of which technologies worked and which ones didn't.

Instead, I was only hoping to convince the Committee that, first, there are extraordinarily important lessons waiting to be learned from the real experience of the war.

Second, these lessons are very different from the shallow picture of the Nintendo war that was fed to us on the TV evening news.

Third, if the Congress wants the benefit of the lessons of the war, we cannot leave the gathering of those lessons to the procurement advocates and the budget propagandists.

For these reasons, I urge the members of the Committee to consider supporting Mr. Franklin Spinney's published proposal to commission a new version of the Strategic Bombing Survey, the brilliant and scholarly analysis of the WWII bombing results. Specifically, I believe the Committee should consider selecting and funding at least one, preferably two or three groups of distinguished, unimpeachably independent scholars and scientists to collect and analyze the combat experience and data of the air and ground campaigns.

That experience and those data are priceless: they were bought with the blood of our troops and our pilots. What they bought will be squandered unless the Congress acts.

The CHAIRMAN. Thank you, as always, for very provocative comments. Mr. Perry, you give your opening statement as you want. We will give everybody a chance to respond to other witnesses, so don't feel you have to respond at this point if you want to just give—because we would like to know what you think of the subject itself, not necessarily in response to Pierre Sprey, but the floor is yours.

Do the time any way you want to.

STATEMENT OF BILL PERRY, CHAIRMAN OF TECHNOLOGIES, STRATEGIES AND ALLIANCES AND FORMER UNDER SECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING

Mr. PERRY. None of us is in the position today to give you a detailed assessment of the performance of specific weapons system in this war, for reasons both Mr. Sprey and Mr. Krings have already articulated.

It is, of course, possible to look at the results and get some sort of an overall assessment, and one dramatic way of looking at results is in term of losses: personnel, tanks, prisoners, all of them amount to about a thousand to one.

These relative losses were so lopsided that there is almost no historical precedent to compare with. We have to reflect that this Iraqi army with whom we are fighting is probably the fourth or fifth largest army in the world at more than a half million men.

They were equipped with relatively modern Soviet equipment, and in some cases with modern Western equipment in the case of the Mirage and the Exocet missiles from France.

I would like to reiterate, first of all, the point that Mr. Krings made about factors contributing to this lop-sided result. Certainly leadership was an important factor. U. S. coalition leadership was outstanding, and that was contrasted with strategic blunders of historic proportions on the part of the Iraqi leadership.

U.S. logistics support was outstanding in getting the personnel, equipment, materiel halfway around the world in a few months. As a result of our air interdiction, the Iraqis had great difficulty supplying forces just a few hundred miles from their capital.

Of course, the training and the motivation of the personnel was important. I simply would support the point that Mr. Krings made that the U.S. was outstanding in that regard, and the Iraqi troops, which had been advertised as being battle-hardened, in fact, turned out to be battle weary and evidently were quite cynical on the cause that they were supporting.

But all of these factors together, in my judgment, while they were crucial to the military victory, do not lead to this 1000 to 1 lop-sided performance. I believe that a crucial factor in the victory was the revolutionary new military technology which was used for the first time in this war.

The weapons systems that incorporated this new technology, while they were built and deployed in the 1980's during the Reagan and Bush administrations, were all developed in the 1970's during the Ford and the Carter administration. They were developed in response to what was then viewed as the threat; namely the percep-

tion that we had to contend with a possible short warning blitzkrieg by the Soviet army in Europe.

We estimated that in that defense we might be out-numbered as much as 3 to 1 in personnel and in armored equipment. Therefore, we developed this new generation of weapons systems specifically to deal with that problem and specifically to offset the numerical advantage which we imagined that the Warsaw Pact forces would have; indeed, in his defense reports in that period, Harold Brown referred to this strategy as the offset strategy; that is, it was to offset this roughly 3 to 1 disadvantage in numbers.

Now, this offset strategy has been widely misunderstood, and it has been debated in simplistic terms of quantity versus quality. It was used as an argument that the United States should develop better fighter aircraft, better tanks, better missiles than the Soviets, and that would give us a qualitative edge that could offset this 3 to 1 quantitative disadvantage.

I believe, indeed, that our tanks and our aircraft are superior to the Soviets, but even in my most optimistic views I would imagine that our superiority in specific weapon systems is on the order of 20, 30 percent, not factors of 2 or 3 to 1, and I have no reason to believe that the superiority of our airplanes and tanks would, indeed, offset numerical disadvantages to that extent.

Much more important in the offset strategy was the development of combat support systems, which put the tanks and the aircraft and the missiles in a battle environment, which you might say gave them unfair advantage over the tanks and the aircraft and the missiles of the Soviets or any opposition forces.

It was these combat support systems which effectively were the force multiplier which we were developing, not the capability of the individual weapons systems as such. To oversimplify, the three most important components of these combat support systems were, number one, the C³I system, that is our tactical intelligence systems; number 2, defense suppression systems, and number three, the incorporation of precision guidance systems into our weapons.

Those were the three principal elements of the combat support systems. Now, the effectiveness of all of these depended to a great extent on the introduction of modern electronics into our equipment, and indeed Marshall Ogarkov, in the early 1980s, writing about this capability, referred to the emerging U.S. military capability as electronic combat.

Let me briefly describe each of these three components in turn with specific reference to how they were employed in the Gulf War. The C³I systems, as the acronym implies, provided the command, control, communications and intelligence, which give us what our military calls situation awareness. That is, it makes our battlefield commanders aware of the situation in the battlefield. In fact, in this war, to an unprecedented degree, they knew where their friendly forces were located, they knew where the enemy forces were located, and they knew where they, themselves, were located.

How did we achieve this situation awareness? For the first time in the war we made extensive use of our so-called national technical means, which is a euphemism for our reconnaissance satellites. During the war all of these systems were dedicated to the support

of military operations, and all of them were connected to the military commanders very nearly in real time.

As a result, all of them had very great significance in the support role which they played. But for all of that significance, these systems have to respond to Kepler's laws.

The CHAIRMAN. To what?

Mr. PERRY. Kepler's laws, which determine how satellites orbit the Earth. As a result, the imaging satellites are limited to taking periodic snapshots on the battlefield, and they cannot provide the continuous or synoptic coverage which is sometimes necessary for the kind of tactical intelligence needed; so in addition to the national systems, in addition to these satellites, we had developed and used for the first time in this war a new generation of tactical reconnaissance systems.

I will point out two in particular because they illustrate the point, I think, very well. One of them was the AWACs, and the other was JSTARS. AWACs has been used previously. It provides the air order of battle in real time over the entire theater.

JSTARS was designed to do the same thing for the ground order of battle; that is, it was designed to determine the location of all of the vehicles on the battlefield. It does that over an area about the size of Kuwait, in real time and in all weather. All of these systems were connected directly to the relevant military commanders, and so the targeting information they provided could be acted on almost immediately upon detection.

The JSTARS, for example, was used in three different roles. First of all, it provided targetting information on the entry of vehicles from Iraq into Kuwait for resupply purposes, and so it played a crucial role in the interdiction of the supply routes into Iraq.

Second, when the ground battles actually were taking place, it was used to target Iraqi tanks, and finally, it was used sporadically to target Scud launchers. I say sporadically because the theater commander had to decide whether he wanted his JSTARS to cover the supply routes into Kuwait or whether he wanted them to cover western Iraq, which is where the Scuds were being launched into Israel.

He generally chose to have them cover the supply routes. I might mention parenthetically that the JSTARS is a new system, not yet operational. There are only two of them available, both developmental systems, and as a consequence, it was only possible to have one in the air at a time.

Additionally, we had night vision devices, primarily FLIRS, (forward looking infrared), on nearly all of our combat vehicles, and as a result of that our military forces, as they say, owned the night, and they made very effective use of that advantage.

All of these sensors in combination gave us the ability to locate enemy forces with great precision and in real time. Contrast that with the aerial reconnaissance that was used in previous wars where an airplane would fly over enemy forces, (with the attendant risk of flying over enemy forces); take a snapshot as he was flying over, fly back to his base with his film, have the film developed, and having the print sent to the battlefield commanders, finally battlefield commanders could plan their operations based on this information, which was many hours old by that time.

In sum, there was an enormous difference in the ability of our battlefield commanders to be aware of the situation on the battlefield.

We also made very effective use during the war of the global positioning satellite. Most of our vehicles and some of our infantry units were equipped with GPS receivers, which allowed them to locate themselves precisely on the battlefield. This is particularly important in desert terrain in which it is very difficult to locate one's self on the map by natural features.

We had advertised the GPS as having an accuracy of 10 meters. I don't have the detailed reports from the field, but the anecdotal reports I hear suggest the actual accuracy was more like about five meters, which is to say that if I were holding a GPS receiver box in my hand, I would not only know I was in this room, but I would know I was in the center of this room, and if you were holding one in your hands, you would know that you were sitting on the congressional side of the room instead of the witness side of the room, and in fact you would know whether you were on the Democratic or the Republican side of the panel. That is the kind of accuracy that our battlefield commanders were getting from the GPS system.

We also used during combat operations an effective command and control system. Generally, the data transmitted from the United States to the theater went over the DSCS satellite, and the command data within the theater was over relatively new digital communication links, the purpose of which was to take the data that was collected from these intelligence sensors, take them to command and control synthesis units, and then further pass them out to the combat units who could make the most effective use of this.

The combination of all of these C³I systems gave us an unparalleled ability to understand precisely what was going on in the field. That is, it gave us a situation awareness the likes of which had never been achieved in any previous military operation.

On top of this, during the first few weeks of the war, we virtually destroyed the Iraqi C³I system. Therefore, we had this enormous leverage not only from this new situation awareness that our forces had, but from the fact that opposing forces had none at all.

What the Iraqi battlefield commander knew was what he could learn by looking out over his bunker. Combat operations under these conditions could be compared to playing basketball with another team, where, under the rules of the game, the other team is blindfolded.

Now, with this analogy you can see that the question as to whether the players on the other team are taller than you are or better dribblers than you are or better shooters than you are becomes largely academic.

The fact that they are blindfolded means that there will be no contest. A large part of the performance leverage and a large part of the results of this victory came from the remarkable effective situation awareness which our forces had, contrasted with the complete absence of it on the other side.

In my judgment, this war did not answer several questions, and even after the detailed analysis of it may not answer conclusively

the question of whether the Abrams tank is more effective than the T-72 or the Bradley Fighting Vehicle is more effective than the BNP.

The T-72 never had a chance because of the intelligence environment in which it was placed and which our forces were placed. So not only will this war not answer that question, but in my judgment it is not a critically important question since it does not in the first instance determine whether or not our forces can be victorious against opposing forces.

It is not an irrelevant question. It is just not the most significant question.

The second major component of the offset strategy was defense suppression. When General Powell testified to this committee in December, he gave you a prospective view of what an air war with Iraq might be like, and he noted that the Iraqi air defense was dense and equipped with modern Soviet-built guns and missiles. One might expect in planning air operations against such a formidable air defense to suffer perhaps one-half to 1 percent attrition.

Historically one loss for every 100 to 200 sorties would be considered an acceptable attrition rate, but in the very intensive air operations, which we conducted in the Gulf War, they would have led to totally unacceptable losses, if we translate one-half to 1 percent against the number of sorties we flew, that would be 500 to 1,000 aircraft lost.

Of course, if that had been the level of losses, we would not have flown that many sorties, and the war would have taken an entirely different turn. But we did not suffer those historical attrition rates because during the last two decades we have developed novel and very effective means of defense suppression.

As a result, instead of losing one aircraft in 200 sorties, it was more like one in 4,000 sorties. The defense suppression systems used in this war were of two different generic types: precursor systems and escort systems.

Early in the war, the use of F-117A stealth fighter and the Tomahawk were crucial in dealing with the Iraqi defense. They were sent in on precursor raids to destroy the radars and the control network of the Iraqi air defense. That is, to disable the eyes, the ears, and the nerve center of this air defense.

The stealth fighter and the Tomahawk were used for this precursor mission because of their relative invulnerability to detection by radars. They were used primarily at night, and they were used because at night the Iraqi air defense required radar detection to target them and were unable to do that.

After the precursor attack disabled the Iraqi air defense, then the main strike was initiated by our attack bombers. The attack bombers were accompanied by escort aircraft, Wild Weasel and F-111 aircraft to engage any radars that were missed in the precursor attack.

Escort aircraft were equipped with electronic countermeasure systems and with HARM missiles. HARM is a radiation seeking missile which is directed against any radar that may still be able or willing to turn on.

Without tracking data for the radars the Iraqi gunners could be compared to a duck hunter operating on a dark moonless night,

armed with a rifle instead of a shotgun, and shooting at ducks that were flying at 400 miles an hour. Not surprisingly, they did not hit many of them, even though the Iraqis had hundreds or even thousands of guns and missiles operating during the campaign.

There were either no air defense radars left or there were no air defense radars left that were willing to turn on. This lack of radar support crippled the effectiveness of the Iraqi air defense system and allowed us to conduct 2,000 to 3,000 sorties per day with minimal losses. So I contend that the performance of the defense suppression systems was also crucial to the military success we had in this war.

The third component in the offset strategy was the use of precision guidance on many of our weapons systems: the laser-guided bomb, hellfire missiles, imaging infrared mavericks and SLM missiles, for example. These weapons, I believe, were dramatically more effective than the carpet bombing and artillery barrages that have been used in previous wars.

Now, I have described three different components of a defense offset strategy, and I want to note that no one of these capabilities is sufficient by itself. The effectiveness of the U.S. and coalition military depended intimately on their interaction.

The effectiveness of our defense suppression depended on the precision guided weapons they used to disable the Iraqi air defense. The effectiveness of the precision-guided weapons depended on the tactical intelligence which gave them the precise location of the targets and the very survivability of the tactical intelligence systems depended on defense suppression.

They were all links in a critical chain. I would also comment in the way of explaining the significance of these different systems that I concur entirely with Mr. Sprey's assessment of the effectiveness of the A-10. I would like to put that in a context, though, that I believe the A-10 was effective for several very important reasons.

First of all, the air supremacy which we enjoyed in Iraq made it possible for it to operate without harassment and attack from enemy air. Second, the defense suppression systems which I have described to you made it possible to operate without attack from radar-guided missiles and guns.

Third, the tactical intelligence that I have described to you provided important inputs to the A-10, directing it to targets that it could attack directly without spending many hours, vulnerable hours searching for targets.

Finally, on some of the A-10's, I understand the Maverick missiles were used whenever they needed to get the advantage of the stand-off range. That is, when they were going against a closely defended target.

I think it is an interesting comment that we underestimated the effectiveness of these new systems. Even though their effectiveness had been demonstrated on proving grounds for last few years, they had never been used in the war before, and we were not quite prepared to accept that they would be that effective. Of course, we had much criticism of these systems before the war suggesting that they would not be effective, and I would like to summarize briefly the principal arguments as to why these systems would not be effective in a war.

The first is that they were too expensive and therefore would result in too few weapons. Of course, the answer to that is, it does not take as many weapons to achieve the desired military effect if you have a high percentage of weapon hits on the target.

The second argument was that the new technology was so complex that it would be unreliable, particularly in the field. I cannot add to the knowledge of this committee about in commission rates and operational readiness rates, and I strongly support the proposal of Mr. Sprey that we try to collect those data.

I will observe, though, that just on the mere facts of the war, the flying of 2,000 to 3,000 sorties a day required that most of our combat aircraft to be having turnover rates of two or three times a day, that is actually flying several sorties a day, so on the surface of it, it would seem that we had reliable, very reliable equipment in the field.

The third argument against the use of the new systems was because of the complexity of the technology in these new weapons systems they would be too difficult for our soldiers to operate.

On the contrary, I think this war demonstrated that our soldiers are quite capable, are well-trained, and they operated the systems very well, indeed.

Finally, there was the argument that the new systems would lose their effectiveness because of the fog of war. I would submit there was no shortage of fog in this war. Our troops faced desert sand, desert dust, unseasonable rain storms and an unprecedented man-made fog that came from the setting on fire of the oil wells. Notwithstanding this, our military and our systems cut through this fog and operated effectively. In short, as Mr. Krings has stated in his talk, the way to cut through the fog is to provide information, and we had an unprecedented quality of information.

In all honesty, I have to say that I, myself, was surprised at how effectively the systems were used, not because I was persuaded by the arguments of the critics, which I have summarized for you, but rather because I had come to believe the old cliché that our generals fight the last war.

Therefore, I couldn't quite believe that they would make full use of and get the full effectiveness of these new systems, and I was wrong in that estimate. My hat is off to General Powell, General Schwarzkopf, General Horner, and all of the military planners who drew up the campaign plan for this war. They not only used these new systems, but they built their tactical plans and them on the belief that the systems would work effectively, and they were right.

We now know, and the world will soon understand, the significance of this new military capability and the advantage it gives us to any military opponent. I would liken the advantages as being comparable to that of an army fighting with tanks fighting against an army equipped with horse calvary. The advantage is real. It is substantial, and it will be so perceived by the world.

I would like to close by raising two questions which I won't try to answer in my statement, but will be happy to discuss during the questions. The first is how do we take advantage of this new technology wisely and effectively. Second, how do we maintain this advantage on into the next century?

Maintaining the advantage requires us to take significant steps to keep the crucial components of this new capability from being diffused through indiscriminate arms sales, and it requires us to continue our efforts to upgrade our own capability. How to do either of those is a complex subject that I don't have time to cover in my opening statement.

I will say, though, that I believe that maintaining this capability is compatible with the defense budget implied in the 6-year plan which Secretary Cheney prepared last August; that is, it is compatible with a reduction in defense spending and the reduction in defense personnel incorporated in his plan.

We can be certain that countries all over the world are going to try to emulate the military technology which we have demonstrated in the Gulf War. There is no secret about how we developed it. From the mid 1970's on we have described in open congressional testimony both the strategy and the programs that led to this capability.

You can be sure that the Soviet Union is studying the lessons from this war very carefully. I will offer an opinion without going into detail at this stage that neither the Soviet Union and certainly not any of the Third World countries will be able to emulate it because they are lacking the technological infrastructure.

The countries that have the technological infrastructure that could emulate this—Japan, Germany, Britain, France—fortunately are military allies of ours. In any event, it will take them many years to go from the technology which they have in their industry to the kind of military capability which I have described to you. So my conclusion is that the United States will have unchallenged leadership in this new military technology for the rest of this century. How long after that depends on how successful we are in constraining the sale of crucial systems to other countries, and also how successful we are in continuing to develop the next generation capability.

How to use this new capability wisely is a much more difficult question. Certainly we do not want to spend the rest of the decade fighting regional conflicts, one Iraqi war after the other. The key to avoiding such entanglements is to use our new strength to deter these regional conflicts rather than fight them.

The United Nations has demonstrated that it has the will to take on peacekeeping operations. The United States has demonstrated that it has the military capability to provide real teeth to those peacekeeping operations. The real challenge, then, for our foreign policy is to project this image of capability forcefully so that we will not have to use it.

Finally, when discussing this new capability, it is important to discuss the limits on its use. It will add little or nothing to our ability to fight the drug war, to deal with terrorism, to deal with hordes of refugees, and will be limited in its effectiveness in any regional conflicts which are basically civil wars, but which are denominated by guerilla warfare.

I would like to end with a quote from Winston Churchill. He said, "Men occasionally stumble over the truth, but most pick themselves up and hurry away without being affected by it."

The truth is, we have demonstrated a new powerful military capability. We should not now pick ourselves up and hurry away without being affected by it. We must restructure our defense policy to take full account of this capability and learn how to use it wisely as an effective force for peace and stability in the world.

Thank you.

The CHAIRMAN. Thank you very much. Thank you all for very, very interesting testimony.

Let me see if I can enlarge on a couple of points that each side made here a second.

Basically, if I could summarize up the testimony of Pierre Sprey, then the testimony of Bill Perry and Jack Krings and then ask each of the others to respond. If I could summarize Pierre Sprey's comments, he says that we have seen, for example, on second look that the Patriot was not as effective as originally advertised, and that maybe this is going to happen in other weapons systems, too, that maybe as more information becomes available, we are going to have some revisions of the story of the technology of these systems later.

He believes that—and he has got some examples. With the exception of the A-10, which of course has been a long-time favorite of Mr. Sprey's, the weapons systems he raised some questions about, other weapons, stealth, AV8B, ground force equipment and others, and calls for essentially a real study to find out whether these were valuable or not or performed as originally advertised or not.

Bill Perry has said that basically what he looks at is not the fact that each of these weapons systems are better than their counterpart. I take it, Bill, what you are saying is the important thing in this overwhelming nature of victory here, which was 1000 to 1, I guess, in terms of casualties, advantage to the American side, can be attributed by technological superiority, but not on a weapon-by-weapon basis where you would say that perhaps the M-1 is 20 to 30 percent better than the T-72, but really due to three kinds of overriding technologies, which are sort of generic technologies, which really gave the advantage, in particular the C³I, you mentioned, the defense suppression, and the precision-guided munitions, which were generic changes on the battlefield.

Mr. PERRY. On top of leadership, training, and logistics.

The CHAIRMAN. Right.

The place where you both agree, I guess, is on the non-technology side of the equation, or we both would agree, everybody would agree that the military performed well, that the leadership was superb, that the quality of the troops was very, very good.

Basically, then, what we are really talking about here is two different views of technology.

I would like to ask Jack Krings and Bill Perry to talk about Pierre Sprey's characterization of the weapons as he—the ones that he talked about, and then I would like to ask Pierre Sprey to talk about Bill Perry's three overriding technological considerations for the C³I and the defense suppression and the precision guided missiles, so let me ask Jack Krings—

Mr. SISISKY. Mr. Chairman, will you yield just one moment?

The CHAIRMAN. Please.

Mr. SISISKY. One other thing I would like for them to talk about is Mr. Sprey's thing about an independent analysis.

I think that is extremely important. If you would comment independent analysis—

The CHAIRMAN. I think Bill Perry already endorsed the notion. It is a very good point.

Who wants to start?

Jack, do you want to start?

Mr. KRINGS. Fine.

I think that what we are seeing is we are finally executing warfare like we do many businesses. We are taking a more pragmatic approach because we are doing a systems approach.

We are trying to make all facets of the execution of war nearly equal so that we don't dominate with the weapons systems themselves and forget about logistic, we don't dominate with accuracies and forget about availability, so we are trying to look at all aspects of it, both the intelligence gathering—it is not unlike what we asked of the development of new weapons systems, where we look at manufacturing when we look at drag.

We are not allowed to separate these things individually and do them seriously anymore, so in the execution of war and the preparation for it, we are doing fundamentally the same thing. We are looking at it as a whole system.

We want to win, but we just don't want one tank to beat one tank. We want to win the whole system, so getting them there, having the intelligence, having the leadership, having the training, they are all equal now.

They never used to be equal. They were serial, and they were very much prioritized in the past. The money went to the hardware primarily.

Training was something that you had to do eventually, support equipment was something that came later, intelligence was often not particularly looked at as being highly valuable, and, of course, the romantic devices got the money, the communication wasn't nearly as romantic as the fighting, so consequently the funding became, I won't say whimsical, but personal desires as opposed to a system approach to get the whole job done. So I think that all these influences, in all three of our discussions really pretty much said the same thing, that unless you put them all together and have a major plan by which they all integrate, it is this old business that the sum or the product is greater than the sum.

When you multiply these all together, they become much, much more effective than if you just add them together, so that the multiplication is the infrastructure that gets them all talking to each other and manages them.

On the case of the individual weapons, we don't want to make, again, until we have accurate information, too many judgments because of the uniqueness of the way the war was prosecuted. We haven't done this kind of a war before.

We haven't done a system approach before, and we are learning a lot. It doesn't mean that any one of our particular systems excelled.

It is the group of them that excelled together. So if you single out a Patriot or you single out a 117, or you single out an A-10,

you have to look at it in the context of what the system provided it to operate in, so alone any one of them could be dominant or total failures, but the system that provides the environment for them to have done what they did, what they did will probably be argued on forever.

I agree, an independent assessment is important. I know whether a shot by shot is worth it, but certainly an independent assessment because we will get the advocate and the critic to be at both ends of the spectrum in terms of evaluation, but, I think what it proves to us is that if we really do this system approach to the whole answer for a problem, which we can apply to many other things, I might add, is the only way we can fairly assess what the contributions were and what the future investment has to be.

The CHAIRMAN. Thank you.

Bill, let me ask you the question, are we likely to find that what we found in the Patriot, that at second look it was not as technically successful as it was thought to be, are we likely to find that in systems that Pierre Sprey mentioned, the Tomahawk, the Stealth, AV-8B, and some of the ground weapons?

Mr. PERRY. My second look at the Patriot is the same as my first look, which is that it is not an effective anti-ballistic missile system. We didn't have a chance to determine how effective it would be as an air defense system because we didn't have any airplanes to defend against. That is really the crucial test of the Patriot.

But as an anti-ballistic missile system, it simply demonstrated what has been known for decades about anti-ballistic missiles is that the key to their effectiveness is their ability to deal with countermeasures, and in this case, while the Scud did not have or the al Hussein did not have deliberate countermeasures, it had inadvertent countermeasures, because it was so poorly designed it broke up into four or five pieces when it came in, and it created effectively false targets and decoys, and the Patriot was unable to cope with that, as I read the data that I am getting back from the field.

Now, we can have a detailed analysis and should have a detailed analysis of the Patriot performance, but there is no reason to believe, based on the design of the Patriot, that it is capable of being effective against an anti-ballistic missile with countermeasures, that is where there are five, six or seven apparent targets out there.

There are ways that it could be tuned and designed to be more effective than it was, but that is a fundamentally difficult problem for any anti-ballistic missile system.

It has to have some way of discriminating real targets from false targets and decoys. Otherwise it will become saturated or it will fire against the false target instead of the real target.

I can comment on some of the other weapons systems if you would like.

The CHAIRMAN. Yes.

The question is, of course, is the question about whether we are in for a series of stores from now on through the summer or the fall that says, wait a minute, you know what we saw on television here isn't really what went on, and let me tell you how it is going to happen.

It is going to happen because the President is very unhappy with the pool system, and they might be looking for a way to get back in at these guys for being hand-fed this stuff, so they are going to feel a little ravining in the eye when somebody like Pierre hands them some statistics that suggests that maybe this was not the technological success that the videotapes, the handouts were portraying.

My prediction is that we are in for a whole series of stories on that. Pierre's laid them out.

Besides, of course, the A-10 which the guys like Pierre like a lot, the systems in question are the Tomahawk, the Stealth, the AV-8B, the ground weapons, and particularly the Bradley and the Abrams.

What is your guess?

Are we going to—is it going to be a situation, from what you now of the effectiveness of these systems, were they oversold at the time of the war?

Mr. PERRY. Well, I would like to see the analysis of these systems based on real data. I mean, not from anecdotal data, so anything I say in terms of assessing individual systems is limited.

I believe that my assessment of the Patriot is—regardless of what data comes in on it, my assessment of the Patriot I am confident in because I believe that the Patriot cannot deal with countermeasures, and I know that there were inadvertent countermeasures being supplied by the al Hussein. I am not surprised at the data I am hearing.

I would be very surprised to learn any different in the follow-on analysis. In terms of the A-10, as I said, I am enthusiastic in my praise for the A-10.

I described the specific reasons why I thought it was particularly effective, to which could be added the two reasons that Pierre brought up which are also important, the effectiveness of its 30 millimeter cannon and the armor plate it had.

In terms of the Stealth, I don't believe that Pierre characterized that correctly at all, but I would rather argue that in the face of real data and in a classified discussion. What can be said is it performed many, many missions over there, and it was not shot down. What further can be said is I am in favor of tests as much as anybody is in favor of tests—but the proposal that we conduct the tests to determine whether the Stealth can be detected is absurd.

We have conducted hundreds of detection tests on the F-117 in every possible environment you can envision. There are large quantities of data available, I am sure available to this committee, and I imagine this committee has looked at some of those data on the detectability of the Stealth.

The F-117A is not an invisible airplane. There are ways it can be detected, can be seen. To make it invulnerable to air defense, you have to use it appropriately. It has to be used in the appropriate operational context.

The bottom line, I believe, is that when used appropriately, it will be relatively invulnerable to an air defense like the one the Iraqis had, and, in fact, was relatively invulnerable to the Iraqi air defense. I think that is what the results will show if you have a chance to look at it carefully.

In terms of the Tomahawk, I am not a fan of the way the Tomahawk was used in this war, but not for the reasons that Pierre gave.

I do not believe the Tomahawk was easy to shoot down nor was shot down very often. I will bow to the data when I see data on that, but I would be surprised if the Iraqi air defense was able to deal effectively with the Tomahawk.

Again, we have conducted hundreds of tests on detectability of the Tomahawk in that kind of an environment.

Second, I would be very much surprised if it had trouble finding targets based on the way the guidance system operates. I think that is a red herring.

Having said that, though, I do not believe the Tomahawk was the appropriate weapon except perhaps in the first few days of this war.

The Tomahawk, whatever the Tomahawk costs these days, \$1 million or \$2 million, whatever the number is, that is what you are paying for one whatever it is, 500-pound bomb, which you dropped on a target, and there are simply much more cost-effective ways of delivering precision bombs on those targets if you have air supremacy. After the third or fourth day of this war, we had air supremacy, and I would see no reason to use Tomahawks in that kind of an environment.

Tomahawks will not do anything that any one of our fighter aircraft can't do much, much more cheaply. All the Tomahawk gives you is the ability to penetrate difficult air defense, and between air supremacy and defense suppression, after about the first week of the war, the Tomahawk seemed to play no unique role. I would not have used it after the first week for that reason. It is a very expensive way of delivering one bomb.

I don't think we are going to get any real assistance in evaluating the M-1, the M-2, and the anti-tanks, because in my judgment, notwithstanding the brilliant sweep that General Schwarzkopf made around the Iraqi Army, I think the Iraqi Army was defeated before the first day of the ground war and not after.

They were defeated by the unprecedented pounding they took from the air, and by the fact that they had completely lost the command and control communication and intelligence.

The CHAIRMAN. I agree. I think that the argument between the military reformers and the others on the Bradley I think is probably still not been decided because the Bradley still hasn't been subject to the live fire.

Mr. KRINGS. Which is very welcome.

The CHAIRMAN. Is good news?

Mr. KRINGS. Especially for Bradley drivers.

The CHAIRMAN. Let me—I want to ask Pierre Sprey's—get his reaction to Bill Perry's characterization, and then I want to let other people ask questions, but basically what Bill Perry was saying, Pierre, just to refresh everybody's memory, was essentially that there were three technologies which had a major role to play that they were not associated with any one particular weapons system, command force—force multipliers, combat support technologies which played a critical role in the rout here, and, indeed, whether that—you saw it that way, too, they were the C3I which allowed us

to know a lot more about the battlefield or all the weapons systems that Bill talked about, a lot more about the battlefield situation than the enemy did, the defense suppression which gave us the ability to fly anywhere and anyway, which gave us the contributing factor to the success of the A-10 and then, of course, the precision-guided munitions. Your reaction, please?

Mr. SPREY. Well, let me say, first of all, that I—

The CHAIRMAN. Pull the mike very close to you so we don't miss anything.

Mr. SPREY. Let me say, first of all, that I think the ideas that Bill has put out about these three overall supporting systems make an excellent hypothesis for the independent study we are talking about to, in fact, check whether it is so or not. That is probably the most difficult task the study faces, to find out whether the intelligence was superb and whether the communications really worked well, and whether the defenses were really suppressed. Those are questions quite separate from whether a tank got hit and clearly important to investigate.

Let me at least make some comments about how and why a review of the combat data might show that the picture was not quite as rosy as Bill painted it.

First of all, there were major intelligence disasters in the theater, that is known already. I am not saying it was an across-the-board intelligence disaster, but there were some major mis-assessments, including a gross miscount of the enemy troops in the Kuwaiti theater. So, all that overhead coverage, all that good JSTARS technology did not avoid some serious intelligence problems.

The intelligence failures need to be looked into. After every war we have always done that, to look at where the intelligence was wrong and what we can do to improve. I suggest this study could be very helpful in that direction.

I am sure that there were areas of communication that were brilliant, that were much better than communications we have had in previous wars, and I haven't heard of any major communications disasters on our side, but nevertheless it is very important to look for them.

There may well have been some real disasters, say at the squadron or platoon or battalion or brigade level. Those are just as important as successes in communicating between Washington and Saudi Arabia.

Another thing that is very important to think about, although there is nothing we can do to settle it, and that is to look at the free ride we got in communications and intelligence. Nobody tried to jam our communications systems, or our navigation systems.

Some of them are very, very vulnerable. Some of our digital links can be jammed by pretty trivial Third World technology. The GPS system certainly can be easily jammed. That is, in essence, a superb, very workable peacetime system. Lots of yachts, lots of private airplanes do use it. It really did work well.

On the other hand, if some enemy wants to put GPS out of business, a little simple jamming can go a long way without too much effort, so that needs to be kept in mind. The vulnerability of GPS to jamming certainly wasn't tested in this war.

I have some fairly different, fairly major differences of view with Bill on the radar defense suppression question. It is very important to distinguish what radars were blinded and what radars weren't.

Mr. SPREY. The Iraqi national-level air defense radar system—long range search radars, linked by communications and some automation of tracking, kind of like our SAGE system or like the NADGE system in Europe—fell apart very quickly after the attack of some key headquarters.

I have worked long and hard on these kinds of national air defense radar/computer systems, in fact, I have designed such a system for a U.S. ally. In my view, these national-level systems are of little major consequence in the real combat effectiveness of an air defense, because they misallocate air defense assets as much as they help to correctly assign them to targets.

Outside the national-level radar system, the other radars which are important are local search radars, and fire control radars. Fire control radars are used for firing missiles and occasionally used for firing guns. We did not blind all of those. There was evidence a lot of them were afraid to turn on late in the war. In fact, there was a general collapse of radar missile air defense in Iraq, not because equipment was destroyed—I am talking about actual firing batteries of missiles—but because people didn't feel like turning them on and risking getting hit by an anti-radiation missile.

That is almost entirely a reflection of grossly inferior morale and training in the Iraqi air defense units because, in combat, other people's air defense units have developed very effective and clever tactics of simply turning off when they see an anti-radar missile launched at them.

You can see a missile launched at you, and turn off and turn back on again. Several overlapping missile sites can do that in a coordinated way. That is why the Wild Weasels didn't have much success against Vietnamese SAMs, because the North Vietnamese air defenders were really skilled, tough and courageous and clever tactically.

There is a very important aspect of the whole air defense picture that we didn't assess. The Iraqi anti-aircraft gun systems, there was apparently no lack of guts among them, and they were very effective. They, in effect, defeated a major portion of our air fleet.

The fact that our airplanes were restricted by U.S. command decision to flying 8,000 feet and above—incidentally, when the bad weather came, we were bombing ineffectively through clouds from 20,000 to 30,000 feet—due to the Iraqi gun defense. That essentially reduced our Air Force to ineffectiveness, or at least the high-speed jet fighter portion of our Air Force, and that was simply because of the guns.

The bad weather was not really bad. The base of the clouds was pretty high, about 4,000 feet. No 500 knot fighters dared fly underneath, simply because of the guns. None of our thin-skinned jet fighters could fly in the clear weather under 4,000 feet, because the Iraqi gun defenses were too rough. At these altitudes, the AA guns tore the unarmored jets apart.

In a very real sense, the gun defenses, as has been the case in every previous air war, dominated the air defense situation and caused a major degradation in the effectiveness of high-speed jets.

The last of Bill's issues I'd like to discuss is whether the precision guided munitions radically changed the nature of the air campaign. I think that is exactly the kind of thing that can be settled by the independent study we are talking about.

I would submit the interesting questions here will be the LGBs since these were the majority of missiles used against fixed targets. My guess is they did not make much difference. They probably did more or less what iron bombs would have done. Maybe a little better, maybe a little less.

The Maverick is a very interesting question, and there are pluses and minuses to be said about the combat results. Very interesting is the fact that almost all the Mavericks were fired by A-10s. F-16s, F-15s, et cetera, fired very few Mavericks. Now, that is a fact of major significance, because one of the criticisms that we made of the Maverick, and one of the things that was very obvious from the operational tests was that Maverick would grossly increase the loss rate of any airplane launching it.

That was not widely appreciated, because everybody thought if the Maverick gives you standoff, and you are further from the target, you are safer. The opposite was true. It is much more dangerous to fire a Maverick than to fire a gun or drop a bomb. The Maverick requires you to approach the target at fairly low altitude, usually within gun envelope and fly straight and level for 15 to 30 seconds.

Flying straight and level for 15 to 30 seconds, even in the presence of only machine guns is nearly suicidal in a standard thin-skinned jet, because the aim of the ground gunners gets much more accurate with every succeeding second of straight-line flight.

Instead of flying straight for a 2 second strafing pass or 3½ seconds for a bombing pass, you have to fly straight for 15 seconds with Maverick. That may cause you 100, perhaps 500 times as much attrition as a 3-second run. We established this in tests using actual Soviet anti-aircraft guns.

It is very significant that very few Mavericks were fired from anything except the A-10. In the independent study, I would check to find whether the experience was that Mavericks were simply too dangerous to fire from the F-16s, so they got relegated to the A-10s that could survive and absorb those anti-aircraft hits.

We will be able to see also whether A-10s flying Mavericks took a lot more hits than A-10s firing their guns. That will be a very important fact to check. There is no question the A-10 did fire a lot of Mavericks and got a lot of tank and artillery kills.

When you had an airplane rugged enough to take the AA punishment associated with launching the Maverick, you got a lot of kills. All of the nighttime A-10 work was done with Mavericks. We did experiments long before the war with an infra-red sight to fire the A-10 gun at night. A lot of people were in favor of installing those on the A-10. Had we had the IR sight plus gun for A-10 night work, we might have been safer and had more kills. That was not done because the Air Force did not want to do anything for the A-10, so we had to rely on Mavericks. Within the limits of exaggerated kill claims, they achieved large numbers of kills.

If you look—I already looked at the Maverick expenditure data and the kills achieved—you will find the hit percentages were not

real high. The data is still classified, so I don't want to discuss the actual percentages, but they were not in the advertised 85-percent range.

Nevertheless, far more tanks were killed with A-10s and Mavericks than by any other aircraft-missile combination. I think all of this underscores the serious need for a detailed look into each of these areas that Bill Perry raised. I think in each of them, there will be extraordinary lessons.

The CHAIRMAN. Last question to you, Pierre, I thought Bill Perry had the right characterization of the argument about the character—about the characterizing the people, the argument of the people who are worried about us being too much high-tech, and that is three concerns:

One was that high-tech would not work in a battlefield situation, the mud, the grit, et cetera; would—they would work fine in peacetime when you were doing tests under ideal conditions, but you get in there and bang them around, high-tech wouldn't work.

The second argument was, in fact, high tech was the—second argument—Bill, you had—

Mr. PERRY. Reliability and operability.

The CHAIRMAN. Reliability, in fact, the high-tech systems—the capability of the people to operate them, that in fact high-tech was too high-tech for people to operate, the people we had in the service, it wouldn't work so well.

Then the—so—and basically, I guess I am asking, is do you—the third argument was that the high-tech meant fewer systems, and if you have fewer systems, it means that you will be less effective, and the argument, I guess, is that the higher-tech would somehow—there wouldn't be an increase in survivability, but an increase in cost, and therefore, you would be short of numbers because of the higher-tech.

I guess I am asking you, did anything that happened in this war change your view of high-tech?

Mr. SPREY. Well, as I said in my introduction, I have a profound disinterest in the abstract concept of high-tech, because I don't understand what separates high-tech from low-tech. I have a very deep interest in distinguishing tech that works, and tech that doesn't work.

I don't understand the distinction between high and low tech because no one can come up with a useful definition of the distinction. It is certainly not the distinction between new and old or the distinction between radically innovative ways of doing things and traditional ways. High versus low is certainly not the difference between simple and complex or between cheap and expensive—after all, I can think of lots of ancient systems that are complicated and expensive, and lots of ultra-modern systems that are simple and cheap.

There is simply technology that works and that doesn't. I think that is what the review of the war has to be about. In the past, I and other military reformers criticized many of the weapons that were being bought. I see little combat evidence at this point to change the majority of these criticisms.

As always in combat, there were some surprises. That's good, because you learn from the surprises. There were some systems that worked in the war much better than I expected. There were a lot that worked as badly or worse than I expected. I think those specifics are what we need to unravel, instead of theorizing about the philosophies and theologies of high tech.

The two interesting things—you heard Bill talk about the Tomahawk being too expensive to use for that purpose. In a lot of ways, much less expensive weapons were still too expensive.

For instance, let us look at Maverick. Maverick was and still is too expensive to stockpile for a 90-day war. If this war hadn't been the short, almost unopposed war it was, we would have been totally out of Mavericks in a few more days and we would have depended on nothing but A-10 cannon rounds to kill tanks. Thank God we had Colonel Dilger in the A-10 project office who got the price per cannon round down from about 90 bucks to 13 bucks. Due to his achievement, the A-10's 30mm cannon is the only air anti-tank weapon in the arsenal for which we have several months of supply instead of several days.

The "too expensive" criticism of a lot of these guided weapons obviously still holds. That doesn't mean that I am against all missiles. There are practical ways of building effective missiles extremely cheaply. It is just that the Defense Department doesn't choose to do so and has strong incentives to not do so. When you build missiles that are more expensive than they need to be, then you are building missiles that are too complicated and too unreliable.

When laser guided bombs get 1.5 percent success rate against bridges, that is not my idea of reliability success. I don't think the claim that our guided weapons worked with surprising reliability, in general, will stand up.

As far as unprecedented sortie rates for airplanes, I don't find any evidence for that. We had 1,800 airplanes in the theater turning out 2,000 sorties a day. I don't know what is unprecedented about that; we did that well or better in Vietnam whenever we put on the pressure to produce sorties. I don't know where the idea of unprecedented aircraft reliability comes from.

The only really remarkable result in aircraft reliability was the A-10 which really did fly between two and three sorties a day. The jets didn't. It is that simple.

As far as the old military reform fear of systems being too difficult to operate, I don't know. I guess we will see—some of these weapons may have proved easy to operate. Some of them probably proved nearly impossible. I guess we will see when the real data comes in and we talk to real operators.

As far as the fog of war, it very obviously did operate very heavily throughout the air campaign, in part because of efforts of the enemy and in part because of a lot of obscurity.

The oil smoke in Kuwait did tremendously interfere with the operation of infrared weapons. We knew before the war that smoke would defeat IR guidance and that is undoubtedly the reason why those oil wells were fired. It wasn't an act of eco-terrorism, it was a brutal act of war against our weapons and it helped the Iraqis mili-

tarily. Fortunately, we had non-IR weapons, too. So we didn't have to be totally crippled by smoke.

There were lots of other aspects of the fog of war. The targeting of enemy tanks on a theater-wide basis was very poor, indeed. That is why the A-10 became so important in finding tanks because we had to have an aircraft that could scour around and find them.

Major theater-wide assets—whether JSTARS, satellites or infra-red reconnaissance—were not a big help, otherwise the thin-skinned jets could have been bombing tanks from 10,000 feet with great effect.

For all the preceding reasons, I would submit we shouldn't pursue this high versus low tech issue at all. It leads to nothing. What we should pursue is what worked and what didn't and why. Then we need to build on the systems that were strengths and get rid of weapons that were weaknesses.

The CHAIRMAN. Norm.

Mr. SISISKY. You had me going pretty good until you down-played the sorties. I disagree with you. I think in the desert that was a monumental task.

Where do you get all your information, Mr. Sprey? I am not trying to be facetious, because I agree with a lot of things you say. You seem to be more knowledgeable than we are. I don't have any information to disagree, other than watching CNN and reading the *Washington Post*, but that is not information.

Mr. SPREY. Much of my information comes from people that I have worked with for 20 years or so in Defense, from pilots, from combat tacticians, from people doing analysis of weapons. Much comes from journalists who were in the theater that I have questioned in great detail about their experiences and what they saw, particularly the ones who had military experience or previous combat reporting experience.

You get very valuable insights if you start with some basic weapons knowledge, some scepticism, and a lot of interest.

Mr. SISISKY. I agree with you that we should have an interest in the assessment—maybe even more. I am very concerned about the inner-service rivalry that is going to take place. It is already taking place with one of the Secretaries which somebody tells me they one the war and they did everything. I am very concerned about that.

Now, having said that, would you visualize it as a sunshine forum? In other words, would you leave it open to the public, or just leave the technical conclusions classified? Obviously, we don't want to let the world know everything that—conclusions that we have reached.

Mr. SPREY. Absolutely. I think we have to think about that very carefully. I initially would be inclined to take the most care in making sure that the teams that do this review are truly independent. That is the single-most important thing.

We cannot have the review done by think tanks that depend entirely on the Defense Department for their income or even agencies with the Defense Department. We need people who have no conflict of interest in this study. That is the foremost requirement of truly independent study.

After that, I think it would be good if these people had clearances or could be given clearances so they could be given access to

a wide variety of information. I think their instructions from the Congress should be that their most important output will be the public information they provide.

But, obviously, some portion of the results have to be withheld for classification reasons. I doubt whether any of the serious lessons learned will have to be classified, in the end. You will run into a problem here because I have seen it happen before. That is when a conclusion is uncomfortable, the classifying authorities in the Pentagon will say it is secret or top secret, even if it is not at all.

I think you have to arrange some mechanism whereby the Congress can take a second opinion of what is classified or what is not. We can't leave that in the hands of some interested military party.

Mr. SISISKY. I would like the other gentlemen to comment on this because I think it is something to make part of our bill in a few weeks or at least consider it anyway.

Mr. PERRY. I think the hearings, to be useful—the analysis to be useful will have to be conducted in a classified basis. I would think, though, this Committee could either hold hearings at an open level or publish a report at the open level or both, so that the salient results are made available to the public.

Mr. KRINGS. I think the challenge is to find the group truly independent. Obviously the most important level of independency are the people who are the participants. We sometimes don't include as strongly as we might those who went to war and put their life on the line and successfully achieved what happened.

Their input is clearly the absolute most important input and the costs of a weapon has to be viewed in the outcome of a war. If you use something that is expensive and win and lose very few lives, I am not so sure that is so expensive. I think much of that is in the eyes of the participants.

One of the most difficult things is to get the true view of the customer, because that is really who we all work for in the first place and that is who accomplished the feat, no matter what we gave to them and that is the one who took the risk.

Tendency has to be to allow the participant who utilized the weapons, who was successful or unsuccessful to give us the feedback to make the judgments for them, not necessarily for us.

Mr. SISISKY. That is interesting that you say that, because in some regards, the customer has already made the decision of what they are going to do. For instance, only last week the Air Force stated here that they were going to reduce the A-10 wings from six to two and replace the A-10 in the late 1990s with A-16s.

Now, maybe they know what they are doing. Five years ago I sat in this room and I had no prejudice for close-in air support, didn't know and they had submitted a chart, and I am looking at the chart and just plain common sense picked the A-10 out of there for the reasons that you stated today.

I mean, it had the armament, it had the canon, everything and it flew slow enough it could see the troops, as a matter of fact, and yet the Air Force insisted that they were going to the A-16. They didn't even want to check the AV-8 Harrier. They already made that decision.

That decision is already set in the budget. They are the customer.

Mr. KRINGS. I think you and I have a different view of the customer. To me, the customer is the JCS and the person who actually executes the war. The customer is not necessarily the service acquiring the equipment and I think that is where you have to get to the crux of the operator, the participant and customer as opposed to the agent of the customer.

Sometimes the agents of the customer have different views than the customer itself. It is only when we get a combat situation like this we can begin to sift the differences between the view of the services and the fighting force. The people who are charged—again, Schwarzkopf was not representing the United States Army when he executed the war, he was representing the United States forces.

I think there we are moving very quickly in the direction of insuring that operational requirements, real operational requirements are coming out of the war fighting community, the JCS and the CINCS, as opposed to service viewed, which I think sometimes are the same and sometimes they aren't.

But in the acquisition process that you all have been helping achieve, the JCS and the operational requirements are dictating very early on what the requirements are and what we buy and what we don't buy. I think insuring that that continues, as opposed to the desire of the given service is really important. So you have to come up—

Mr. SISISKY. So the JCS has already made that decision then, I guess. So—and it always—it is very interesting to me, too, that the Patriot, without any real analysis, that thing is so hot they moved that into SDIO, I think, and putting a lot of money into it through the theater ballistic missile which is probably very important.

The point I am making is the decision has largely been made on some of these things. Maybe they know by their analysis what happened and we don't know. Of course, we don't know.

I sat in this room twice a week on classified briefings asking for the new buzz word in this place, BDA, I didn't know what the devil—bomb damage assessment. Never got any. As a matter of fact, I don't know whether to this day we have any bomb damage assessment, or it was too cloudy.

Anyway, this has been an excellent meeting, Mr. Chairman. I really enjoyed all the witnesses' testifying and I think it is of great import to this Committee and the country.

The CHAIRMAN. Mr. McCrery.

Mr. MCCRERY. Thank you, Mr. Chairman. I too have enjoyed the hearing this morning.

Mr. Sprey, correct me if my assumption is wrong, but I assume you are persuaded we won the war in a fairly overwhelming matter; is that correct?

Mr. SPREY. Yes, I have reservations about how much of that was due to technology versus skill and guts versus strong disinterest on the other side.

Mr. MCCRERY. I heard your reservations. To what do you attribute the overwhelming victory that we achieved?

Mr. SPREY. I attribute it to a high order of guts and skill and determination on our side, and almost total moral collapse on the other side, a collapse that I am not sure is very intimately connect-

ed with the bombing even with the clear inadequacies of their communications.

I think that is one of the really important things that this study will need to look into. The Strategic Bombing Survey after World War II did the same thing. The survey spent a major volume on the question of German morale and what kept it so strong for so long and what made it fail when it did.

That is the way wars are won and lost. They are won and lost by moral strength and moral collapse. I know I don't understand the real reasons for the Iraqi moral collapse. I am not sure there are many people in this country who do understand the nature of this unprecedented collapse in the Iraqi Army.

To say it was because of the bombing I think is certainly premature, certainly when you look at the casualty numbers. Actual military casualties from bombing were astonishingly low. There must have been something other than their soldiers getting wounded and killed by bombing that prompted 200,000 of them to decide to walk out of the theater before the war began and to not fight.

There is something really to be learned there. I have no preconception what those lessons will be, but we need to get to the root causes because those are the things that make for great victories.

Mr. McCRERY. It is surprising, particularly in light of the experts we heard before this Committee prior to the war telling us what great fighting people the Iraqis were and how their equipment was first rate. I, too, am surprised we were able to achieve this victory and so quickly.

Their morale must have been bad when they started, because we achieved this primarily through the air and in just a matter of a few weeks. But in a nut shell, your explanation for why we won this war in such a convincing manner is that we were better fighters. Our people had better morale and that pretty well sums it up.

Mr. SPREY. That is a general statement on my part. Let me add to it: what really wins and loses wars is a much more dominant issue than all the technological differences we like to argue about so much. That is not an excuse for buying bad weapons or anything else. It is simply a fact of life. If you study military history, it is people that win and lose wars primarily, and it is the things that affect their minds that allow you to win quickly and bloodlessly.

Mr. McCRERY. You don't think the fact we established air superiority in just a matter of a few days had anything to do with their state of mind?

Mr. SPREY. I didn't say that. I told you I didn't know what the effect of the bombing was. I am raising the possibility the bombing didn't have nearly as powerful an effect as is generally believed.

I'll give you an example of something that might have had a very powerful effect indeed, and I think somebody here mentioned it already: It looked like the Iraqis were battle weary. They fought for 8 years against the Iranians and incidentally, they found with great tenacity and courage and a half million of them died and were wounded during the course of that war. You can't make a blanket statement that Iraqis are cowards or unwilling to fight.

But a most significant event occurred in Iraq, an event people didn't make much of in this country: very soon after we started to build up the Desert Shield forces, Saddam Hussein turned around

and made a very quick peace with the Iranians. He essentially gave away in a minute everything the Iraqis had bled and died for for 8 years, gave it all back to the Iranians.

Saddam had to, because he couldn't fight a war on two fronts. He couldn't face a war with us in Saudi Arabia and have enough forces to defend a second front against the Iranians. It is very possible the cost of that very expensive peace with Iran was the collapse of the morale of all those Iraqi soldiers that were facing the prospect of dying in Kuwait.

I am not an Arabist. I have no way of delving to the bottom of that.

The CHAIRMAN. Will the gentleman yield?

Mr. McCrery. Yes.

The CHAIRMAN. Pierre, I am surprised at your explanation. Why don't you as a military reformer explain the collapse of the Army forces in the John Boyd theory.

Mr. SPREY. This is the John Boyd theory. The John Boyd theory holds that the mental and moral factors that drive people are the overwhelmingly important elements in winning and losing. You need to understand what causes the collapse of morale, no matter whether it's due to politics, religion, starvation or military force.

The CHAIRMAN. The explanation under Boyd theory would not necessarily be what happened with the Iran-Iraq war. We got inside their decisionmaking. We did a big maneuver warfare operation way out to the west, and all of a sudden, we were in behind them.

That is pure John Boyd, at least the ground war was. The air war was just pounding them. But even there, in the air war concept, I think—I mean, the explanation John Boyd would have laid it out differently than you do here, Pierre, I guess.

Mr. SPREY. I agree with you wholeheartedly. The air was the same old classic attrition warfare, interdiction bombing stuff we did in WW-2. There were no new ideas in the actual strategy of the air war. There may have been some new tactics, particularly in the A-10 side, but basically the overall direction of the air war was the same old stuff that generals have been doing in picking bombing target lists since 1942.

The ground war was a brilliantly different plan of campaign. It reflects the fact there were a lot of young staff officers on the staff of General Schwarzkopf who heard and understood John Boyd's ideas. General Schwarzkopf saw the merit of those ideas and approved that plan.

That doesn't mean that that plan won the war because, in fact, 100,000 or 200,000 Iraqi soldiers had already decided before day one of that plan they weren't going to fight, and they were going to leave the theater. In a sense, the plan wasn't challenged. Had it been challenged, I think it would have done brilliantly.

I think it would have been a vital ingredient of victory. As far as I can see the sequence of events and timing of the collapse of the Iraqi army, that rot had already set in before we crossed the border. That is the heart of the 1,000-to-1 victory, and understanding what caused that moral collapse is the heart of understanding why it was such an easy war.

Those are the kinds of ideas I learned from John Boyd. You have to look at the state of mind of the enemy's people, and whatever it takes to bring about moral collapse. It is not just campaign plans and maneuvers that cause the enemy's soldiers to lose morale.

Let me give you another example: France in World War II. France was defeated before the first German tank crossed the border. Although the Germans executed a brilliant blitzkrieg campaign, it was the topping on the cake.

France itself was almost totally defeated before the invasion because a third of the population were Fascist sympathizers and 80 percent of the rest were sick and tired of the casualties from World War I. The state of morale of the French army was pretty bad.

That was really the heart of the collapse. Then the collapse came super fast because of a brilliant maneuver warfare campaign plan.

In the Gulf victory, I think we were looking at something like the French collapse, except even more extreme in the case of Iraq, and I don't pretend to understand why.

All I am suggesting is that a very important part of the study that I hope we undertake is to understand these moral factors in the Iraqi defeat.

Mr. McCrery. Just one more question, Mr. Chairman.

How do you explain the fact that the F-117's were used disproportionately in the opening stages of the war, disproportionately in terms of the sorties they ran, compared to the number of aircraft they represented as a percentage of the whole, and knocked out some of the elements of the Iraqi Army that allowed us to establish air superiority, and yet we didn't lose a single 117?

Mr. Sprey. For the same reason that the other fighters that flew 10,000 feet and higher didn't get hit, either. That is not a tribute to the survivability of the airplane.

It just means if you stay out of the close-in combat zone, it is not hard to survive. Every airplane in the war survived beautifully as long as they flew high. At high altitude there are no guns to reach you, and the radar missiles that can reach you are very easy to outmaneuver, with or without stealth.

In general, in previous wars it has taken anywhere from 100 to 500 surface-to-air radar missiles to get a single kill. They are just not a big threat if you see them coming and if you fly high.

So, the F-117 achieved the same thing as the F-16 or the F-15: when you flew high, you didn't get hit. There is no miracle there.

I am not sure about the disproportionate sorties of the 117 early in the war. It is true that they were assigned, early on, to the targets in Baghdad, so they flew most of the missions to Baghdad.

I am not sure at all that F-117s flew some disproportionate number of sorties, in toto across the theater. They flew at their maximum sortie rate and everyone else flew at their maximum sortie rate right from the beginning of the air war.

The Chairman. Richard.

Mr. Ray. Thank you, Mr. Chairman, Mr. Perry, Mr. Krings, good to hear your balanced assessments, I guess I am just as astounded as you are.

I come from a providence area of the country, Fort Benning, Georgia. If I had those opinions, I would ever be elected, but I

would be tarred and feathered in the process, but nevertheless, I appreciate it very much.

It did let us know that someone with that point of view is out there. I am not going to cross-examine you, as has been done, but let me just ask a few questions maybe to all of you.

The questions to all three of you, was the Patriot successful as a point defense system? This committee has worked awfully hard to keep it funded, for more than a decade now.

That is what it is, point defense, system defense aircraft first, then modified with not enough experience against missiles.

Mr. KRINGS. I would agree with Bill Perry's assessment that that is not an answer that comes out of this war. If we were to ask that question and try to prove it, which we have done in the past through non-combat testing, we have proven that it is a good point of defense system, but not—this was not an effort that looked anything like what we had done with the Patriot before.

Therefore, it is another—it is an answer to another question other than the question for which Patriot was originally developed.

Mr. RAY. Mr. Perry.

Do you have any comments, Mr. Perry?

Mr. PERRY. No, I agree with Mr. Krings.

Mr. RAY. Mr. Sprey.

Mr. SPREY. I have a couple of comments just on the Patriot.

First of all, everybody is suddenly saying the Patriot wasn't an ABM system, so we are expecting unreasonable capabilities of it. That is not exactly right because, in fact, the Patriot was started as an ABM system.

Patriot was originally started as the TABM, the tactical ABM system, in the late 1950s. Secretary McNamara canceled it very early in his tenure because it was for the nuclear defense of Europe. He was trying to reduce forces and expenditures for tactical nuclear defense in Europe because he thought any tactical nuclear war would quickly become strategic in scope.

The Army revived TABM out of the ashes of that cancellation disaster simply by giving it a new name—SAM-D. The Army kept the same very high acceleration, very high velocity missile air frame and for a while kept the same radar. Then there was another major upheaval in the program and we added a doppler radar.

In fact, the Patriot system is very heavily compromised in the direction of an ABM, and there are reasons to suppose that it is, in fact, substantially less than optimum as an air defense missile against fighters because of that early history. Remember, the Congress and the taxpayer paid \$15 billion for the Patriot because the Army claimed it was very effective against fighters.

I do not think the tests to date have established that it is, in fact, effective against the multiple maneuvering fighters typical of any air war and I think that issue badly needs to be tested before the next war.

Mr. KRINGS. There is one aspect of it that we did evaluate, and that is everything except the intercept of an attacking fighter. We certainly have data, and I don't know what the answer is, because we will see what it is on availability, maintainability, operability, transportability.

We probably had the most unique opportunity to measure transportability as we have in many weapons systems, how quickly we respond and how transportable it was.

All of these issues that have to do with the capability of the system other than its ability to shoot down an enemy aircraft that is attacking it at its point, we have adequate data in real, honest to God combat field data to answer almost all of these suitability questions, which are equally important, and in many cases with many of our new weapons systems seems to be the weakest part of, so we can learn a lot from it, yes.

Mr. RAY. Well, because of our interest from the committee, we followed it very closely.

I was rather pleased with what I saw, knowing that it was just the first testing of a system that had only been developed to the missile stage within just a few years, 2 or 3 years.

I think, Mr. Sprey, you did say that the damage was worse, about 400 percent worse after Patriot was deployed in Israel, but as I recall, 47 Scud attacks against Israel, it was deployed within just 2 or 3 days after the first Scud attack, so isn't that correct?

I don't think we had more than two or three Scud attacks before the Patriot was put in.

Mr. SPREY. The Israeli picture was 13 Scuds attacked Israel before the Patriot was deployed and 11 Scuds attacked afterwards, so it was brought in almost midway through the campaign. We got a pretty even balance.

Mr. RAY. The one instance that I know of where severe damage was done was when it hit the bear action over in Saudi Arabia. It just did horrendous damage there, where it had not been intercepted.

We did follow it very closely. We knew the Scud many times was breaking up as the Patriot was flying, was launched, and sometimes it might have difficulty which piece to go after, and so that is why we started firing more than one, so to catch both segments there.

Do any of you know if the F-16s was used in an attack role?

Mr. SPREY. Yes.

Mr. RAY. It was used.

Mr. KRINGS. I know it was used, but I don't know to what extent and with what successes.

Mr. SPREY. The answer is the F-16s were used almost entirely in an attack role, and the Air Force wished to preserve the F-15 as the air-to-air asset.

To my mind, this was a very unfortunate choice, even though I am a big F-16 supporter and spent 5 or 6 years of my life helping to develop it. The F-16 is, in fact, a terribly vulnerable airplane as an attack bomber and should have never been made an attack bomber.

We designed it to be the best air-to-air fighter in the world, and I think we succeeded, at least with the F-16A. Later models had their air-to-air performance seriously compromised.

Mr. RAY. Was it successful in the attack role?

Mr. SPREY. Well, I would say not very successful. Why? For the simple reason that it was forced to fly at 8000 feet and above, and you can't do real good work against really serious military targets

from those high altitudes. This is no way to make an F-16 survivable enough to fly at 2000 feet.

You would have to totally redesign it, and you would have to make it look like an A-10.

Mr. RAY. You did mention a high number of sorties to hit bridges. Did the sorties that you mentioned include the activities, refueling and so forth, all of the activities supporting?

Mr. SPREY. No, they were not the support sorties, they were the attack sorties.

Mr. RAY. All right, sir.

Well, I will say one thing in my final question here, one thing that is missing from other wars is the low rate of casualties, and there must have been some reason for that.

What credibility do you give us for that?

Mr. SPREY. For achieving such low casualties on our side? I think I just discussed that with Mr. McCrery. That was due to the tremendous disparity in skill and morale between the military people of the two sides.

When the other side decides not to fight, then your side has a terrific advantage in low casualties and easy, quick victory plus high casualties for them.

Mr. KRINGS. I don't agree.

I think that the systems approach that we took and what Bill Perry has talked about, the elements that go together to try to achieve this demoralization of the enemy is very, very important.

It did affect the differences in casualties significantly when one can survive, stand off, do very effective planning with long range weapons, and can successfully reduce the defenses, all of which is done by a combination of technology, and I won't say high or low, either, I will say successful technology, when that can be done, it did dramatically reduce the casualties.

I think if we look back on the many other wars, we will see what I would call low technology against low technology is generally very high casualties. As the technology differential gets greater, I believe that we are finding out now, and we have certainly seen in almost all the operational testing that we have done that both the exchange ranges of vehicles and equipment and development the casualty rates seem to find the same sort of proportional correlation between technology.

Mr. PERRY. Mr. Chairman, could I make a comment?

This will have to be my final comment because I have to catch a plane back to California.

It will address that point, but also generalized a little bit more than that.

I agree entirely with Mr. Sprey that morale, training, spirit of fighting people was an exceedingly important factor. But I don't think there is such a great mystery about why that differential occurred. The evidence we have is that the Iraqi troops were tenacious and were reasonably well trained, and we have a previous war of observing them to come to that conclusion.

Now, what happened to them in the course of this more than 5 weeks of an air war was what shattered that morale and that fighting spirit.

One does not have to conduct intensive interviews of Iraqi soldiers to understand the impact on their morale of: first of all, having totally lost air supremacy, to not even be able to put an airplane up after the first week; second, to have an almost complete lack of communications; third, to have almost a total lack of intelligence about what was going on, along with the full recognition that their opponents had very excellent intelligence; fourth, on a day-to-day basis to be losing their equipment—they had lost something more than half of their equipment, their armored equipment, their tanks, armored personnel carrier and artillery, by the time the ground war started. That has to be sending a very profound message to any Iraqi soldier who is reflecting on what this means, and that has to have a profound effect on his morale and fighting spirit.

Then finally, there was the brilliant speech made by Saddam Hussein about half way through the air war, where he forecasted that they are going to win the war in spite of the unfavorable beginning, because the Americans were not able to take casualties, whereas his soldiers, his army was quite prepared to take large casualties.

I don't know what impact that message had in the United States, which is where it was directed, but you can imagine the impact on his own soldiers. These thousands of casualties that he was talking about, they could easily translate into themselves, and they could see having lost all their equipment by then and having no air, and no communications, they could see that this was going to be a suicidal kind of defense.

There were not that many Iraqi casualties during the air war because we were directing our attacks at the equipment, but the significance of losing the equipment was very clear, to the Iraqi soldiers.

Most of the Iraqi losses in the air war, then, were not due to casualties of the ground forces, but to defections and desertions, so that by the time the ground war started, the Iraqi Army had already been defeated.

Mr. RAY. Thanks a lot.

I will just end by saying that during the Middle East War there were more casualties in some major cities in the United States than in the Middle East.

Mr. PERRY. Mr. Chairman, may I be excused at this time.

The CHAIRMAN. You sure can, Bill.

Thank you for coming. I appreciate your help today.

It was very, very interesting.

Mr. SISISKY. I was going to accept his challenge and ask him the two questions of how we maintain—

Mr. PERRY. The answer to those will take an hour or two, but I will be happy to return on that subject.

The CHAIRMAN. Next time you are in town we will do it.

We won't make you come back just for that, but next time you are in town.

Denny, do you have any questions for the two remaining witnesses?

Mr. HERTEL. Yes, thank you, Mr. Chairman.

I want to thank Bill Perry for all the help he has given us for many years. I have enjoyed very much what you have had to say.

Following up on what Mr. Perry said, do you think it was just that the Iraqi soldiers saw the superiority over all of our forces by all the events that occurred, that they themselves, the people on the ground, rather than Saddam Hussein, who wasn't logical and didn't care about them, which he made clear from his speech, that they saw the superiority of our forces was so overwhelming?

Mr. KRINGS. I think it may have been very difficult for them to see that individually, because for the lack of information they had, personally, everything that I saw, when they were, in fact, overrun or they defected or through whatever means we had to eventually reach them, they had very, very little knowledge about what was going on or even which direction the enemy was going to come from, and in many cases didn't even know which flank to protect or which way to look, and, of course, just because they lived there didn't necessarily give them some unique ability to find their way around in a barren desert.

GPS is a lot better way to find your way around. So they enjoyed the same problems as we did in trying to find our way around through the desert, so clearly they individually, I am sure, did not have some great comprehension of how the war was really going.

They just, I am sure, as anybody else would, with a lack of knowledge, if you don't hear anything for a long time and nobody seems to come around, you probably can assume you are not doing very well, and I would think on an individual basis it would be very demoralizing because this business of fog of war is fundamentally not knowing—you are in the fog and you can't see what is going on, and they were clearly in the fog. So they were, I am sure, demoralized, but also incapable of doing very much even if they did want to effect a strike because they didn't know where they were or they had a total lack of communications and supply, so that inevitably, and Bill Perry is absolutely right, that is what ultimately brings the defeat.

I guess what we are really arguing is the mechanism by which you achieve that, as opposed to that being the fundamental reason that the breaks down.

We would argue mostly on how you accomplish that. But I don't think very many individual Iraqi soldiers knew very much that was going on at all.

Mr. HERTEL. In talking about the Patriot missile and these limited circumstances, you would agree, though, that the political importance of it, as far as morale for protection of our troops, keeping Israel out of the action, that in that regard the Patriot, in this unique circumstance, was very important?

Mr. KRINGS. Of course, yes.

I think if it did nothing but achieve that, to just convince Israel not to enter the war with what they—and had what they might have done and what may have been the result, I think that was significant. The fact that the Patriot was easily and readily transported to Israel and it did bolster their defense, now the effectiveness is arguable.

There is no question about that, the effectiveness is arguable. But it did accomplish keeping them out of the war.

I guess there has to be a certain view of their assessment of Patriot, because they were not exactly enthused about Patriot before the war, and so while you often are very concerned about the advocate coming over here and telling you how great the system is, you must often take with a grain of salt the person who has a competition to it or who didn't want it in the first place.

So there is going to be a certain amount of concern about how their view of the Patriot was even before Patriot got there, let alone it left.

Mr. HERTEL. Mr. Krings, earlier you were talking about talking to the people in the field as to what they thought worked and what didn't work, and this very next weekend the Investigations Committee is going to be holding hearings in Saudi Arabia to talk to the command people that were in the field.

Could both of you give us any specifics that you think we should ask them in the field there and also when they return here before the full committee?

Mr. KRINGS. I think it would be pretty difficult to try to enumerate sort of a bank of questions or areas. I think the most important thing is that the farther you get down the chain, the better the information gets, and clearly those who are the participants, especially the type of people that we have in the service today, the professional volunteer that we have today tends to be a lot more open with his expressions about how well things worked or didn't work, at least my exposure of going to the field with the servicemen was absolutely true.

They were very, very willing to discuss the good and the bad things, and I think even though we had little limited exposure by the pool, we did see a lot of people, again when they got down to the troop level, expressing very candidly what they felt either about their situation in that particular time, which was politically very sensitive, I am sure, but they will give the same sort of feedback on the equipment. I think if I were to suggest anything, that getting the information appropriately from the participants at lowest levels that did whatever the event is that you are looking for, and it may be planning, and consequently, they are fairly high, but nevertheless, I think you will get the answers, the truthful answers as to what worked, what didn't work, and what was successful and what wasn't, and I found, as we had discussed many times here, that that is really the only place you will really find the real truth.

Mr. HERTEL. I agree, and they were very frank with us in December.

Mr. Sprey.

Mr. SPREY. Well, I certainly second what Mr. Krings said on your investigation over there.

I think it is of tremendous importance to go to the lowest-ranking people possibly if you really want to get an assessment. You need to talk to privates, corporals and 22-year old lieutenants flying helicopters or airplanes, and you need to talk to them in the absence of higher ranking officers.

I would be very happy to help you with extensive set of specific questions to do with specific weapons and operations and so on, if you would like, before the committee leaves.

I would be very pleased and honored to do hat.

As far as—I would like to make just one comment on the Patriot. I just don't see how you have done a lot for somebody's morale when you have actually added 80 percent to their casualties with the weapons systems that is supposed to be defending them, and I would be astonished if the Patriot had much to do with keeping Israel out of the war.

I mean, we like to say that, and it was very current in the American press before I would be prepared to believe that, I would have to hear it from a whole bunch of Israelis, that they believed it, because I think there is reason to be very skeptical about that.

Mr. HERTEL. Well, I think sometimes perceptions has a great deal to do with morale, and I think in this case that it really did.

Mr. SPREY. But I don't think it was Israeli perception. I think it was our perception that it kept them out of the war. I don't think the Israelis see it that way.

Mr. HERTEL. If we could try to measure their opinion, but I think as far as our forces, we know that it did assist with the morale of our forces, even with the tragedy that did occur overall, they felt we were able to combat these missiles, and they could see them being shot down.

I think part of it was the American public could see the Scud missiles being shot down as well as our troops, and I think that did have an effect.

Thank you, Mr. Chairman.

The CHAIRMAN. Gentlemen, thank you very much. It was a very, very interesting morning.

Thank you both.

[Whereupon, at 12:50 p.m., the subcommittees and panel adjourned.]

GOLDWATER-NICHOLS DOD REORGANIZATION ACT OF 1986 AND THE GULF WAR

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
DEFENSE POLICY PANEL,
Washington, DC, Thursday, April 25, 1991.

The panel met, pursuant to notice, at 9:38 a.m., in room 2118, Rayburn House Office Building, Hon. Les Aspin (chairman of the panel) presiding.

STATEMENT OF HON. LES ASPIN, A REPRESENTATIVE FROM WISCONSIN, CHAIRMAN, HOUSE ARMED SERVICES COMMITTEE

The CHAIRMAN. The meeting will come to order this morning.

Today the Defense Policy Panel welcomes as its witness Lt. Gen. Thomas Kelly. As many of you know, General Kelly retired March 31st as Joint Staff Director of Operations after playing a key role in Operations Desert Shield and Desert Storm. We are very pleased to have him here this morning to testify on the planning and conduct of the war and the impact of the Goldwater-Nichols Military Reform Act.

General Kelly began his tenure on the Joint Staff Operations Directorate about a year after Goldwater-Nichols was enacted. He took part in implementing its reforms under Adm. William Crowe, the immediate past Chairman of the Joint Chiefs of Staff, and Gen. Colin Powell, the current Chairman. General Kelly has lived Goldwater-Nichols, and so we are especially pleased to have him here to testify this morning.

We plan to focus our discussion now on operations and command and control in Desert Shield/Storm from a Joint Staff perspective. How did it work? Did Goldwater-Nichols fix the problem that it was designed to address? What still needs improving? The answers to these questions are important to us as we strive to develop a defense that works against the real threats of the post-Cold War world.

Incidentally, of course, General Kelly can also talk about Operation Just Cause because that also was an operation that Goldwater-Nichols affected. We can ask about that, too. But before we get started, let me ask if Bill Dickinson has some comments to make.

STATEMENT OF HON. WILLIAM L. DICKINSON, A REPRESENTATIVE FROM ALABAMA, RANKING MINORITY MEMBER, HOUSE ARMED SERVICES COMMITTEE

Mr. DICKINSON. Thank you, Mr. Chairman. A very few.

I would like to welcome you here. I join with the Chairman in all of his statement. You made us very proud during Desert Storm and I think your performance in explaining the operation to the American people had a lot to do with it.

We talk about Goldwater-Nichols and we take some pride on this committee in the fact that this legislation was put on the books. It was really the thrust from this committee that made it happen.

I have a suspicion—I would like you to address this if you would, General—that one thing was missing in this Desert Storm operation. I do not think that our intelligence relay functioned as well as it should. I do not think that the intelligence collected on the field that had to come back to Washington and filter back to the theater. I think that we would do better to have it more direct as the Goldwater-Nichols Act did with operations. If you have an opinion about this, I would appreciate your addressing that.

We welcome you here today and I yield back, Mr. Chairman.

The CHAIRMAN. Thank you.

General Kelly, the floor is yours, sir, for whatever statement you would like to make.

**STATEMENT OF LT. GEN. THOMAS W. KELLY (U.S.A., RETIRED),
FORMER DIRECTOR OF OPERATIONS, JOINT CHIEFS OF STAFF**

General KELLY. First, I came to the Joint Staff in June of 1986. I was Director of the Joint Special Operations Agency for a year and actually formed the Special Operations Command at the direction of the Congress, by the way. Then I went away for 5 months, waiting for the J-3 job and came back. From December of 1986 on, I was at J-3. So I really spanned Goldwater-Nichols. I was there before, during and after.

I can only give you the perspective from the J-3. I cannot give you the perspective of the Joint Staff. It is my personal opinion that Goldwater-Nichols was a single piece of legislation that considerably improved the capability of the National Command Authority to pursue military operations. I will give a couple examples why.

Prior to Goldwater-Nichols, the Joint Staff did not work for the Chairman of the Joint Chiefs of Staff. It worked for the Joint Chiefs of Staff, which meant that we could be tasked by any member of the Joint Chiefs of Staff. That made life on the Joint Staff very difficult.

The Chairman had a small Chairman's Staff Group that worked directly for him and I think that was only six or seven people. He was somewhat limited in his control. He did not have any help, he did not have any Vice Chairman and I think that as a result of all that, the Joint Staff was not as effective as they could have been.

Also, as you well know, we did not necessarily have all of the cream of the crop assigned to the Joint Staff. When I came to Washington the first time, the advice I got from my colleagues and mentors was get on the Army Staff, that is where the action is. That has all changed now.

The Joint Staff does in fact work for the Chairman. Probably the most significant part of the legislation from my perspective, understanding it is limited, is that he is the advisor to the Secretary and

the President on military matters. The Chiefs can make a separate representation, should they care to, but basically he has the authority to go forward himself and while that difference is sophisticated, it is also very, very significant. Now, any chairman who is wise is going to get the Chiefs working with him. Both chairmen for whom I worked have done that. The Chiefs are great Americans, by the way. They are as sincerely interested in the good of the country as anyone else is. So they do work very closely but it is more a difference of tone in the way that business is done now as compared to the way it was done before.

I would mention a couple of specific examples: they are Panama and Desert Shield/Desert Storm. The jointness of those two operations—in the one case, not much jointness, which is good; and in the other case a great deal of jointness, which is good—attest to the fact that we have a system in place that is functioning very, very well.

What I meant by the Panamanian reference is there was not much involvement of the Marine Corps in Panama. There would have had the job been more difficult than we thought it would be but there was not any problem as a result. So that was good.

In Desert Shield and Desert Storm, I do not think that the United States has ever conducted a more joint action where the forces in the field worked more closely together. I notice one of the questions was why there was not a joint command in Saudi Arabia that would encompass the Marines and the Army. The fact is there was a joint command in Saudi Arabia that encompassed the Marines and the Army and it was headed by General Schwarzkopf. The geography of the battle was such that you did not need a level below him to integrate those efforts.

He had a Marine Corps on the right consisting of two Marine divisions, two Marine air wings, that is easily a corps' worth of combat power out there. Incidentally, on their right, there were some small Saudi units reinforced, I think, by some folks from Qatar. To their left was the Arab corps, primarily a couple of Saudi divisions, a couple of Egyptian divisions, a Syrian division, a Kuwaiti brigade or so and then some other forces.

Then to the left of them was the Army 7th Corps which, I believe, had five divisions to include the British First Armored Division, and to the left of them the 18th Airborne Corps, to include four divisions, one of which was the French division.

The way the battlefield was laid out, I think the command and control arrangements were fully adequate to properly exercise those forces. I will get into the conduct of the battle a little bit later.

I think giving the Chairman the authority to advise the NCA was a very significant step. It enabled him to take on things that he had not taken on before and, as a matter of fact, I think for all history prior to Goldwater-Nichols, the Joint Staff dealt in what was referred to as an objective force or as an acceptable moderate risk force or what have you, which did not really bear a great deal of relation to reality.

The services were programming and the fact is all of the decisions that really counted, as you well know, were made between the services and the Office of the Secretary of Defense.

Now, the Chairman has the capability to enter into the planning, programming and budgeting system, not necessarily to run it, and I think it would be wrong to run it because there are a lot of smart people in the services that know how to do that work and it takes an awful lot of information and data to build the mountain. But the Chairman has the opportunity to influence the shape of the mountain. That really is what I think the Chairman of the Joint Chiefs of Staff should be doing.

What I mean by that prior to Goldwater-Nichols, I think, each service was very honestly trying to win the war—by service. Now there is an effort afoot to try to integrate the efforts of the services. I think synergism will come from that.

I think that we are taking a look at the reduction of the defense budget over time and we can no longer afford the luxury of letting each service try to win the war, so somebody is going to have to establish some priorities. The business gets pretty tough within the Army and I used to work in priorities. At some point, a fuel truck became more important than the tank it supported because it is no good to have a tank if you did not have fuel for it.

Somebody now has to decide what is more important for the United States—a new tank, a new fighter aircraft, a new strategic bomber, or a new carrier battle group. They are not easy decisions but they need to be made by someone a little bit removed from the service fray who is not a bookkeeper, someone who is a war fighter. I think personally that we have people in place that can do that.

That is a phase of the business in which I was not involved. I was fortunate. I got to deal with the forces in being and got to employ them around the world but I had a moderate passing interest in what was going to happen in the future of the service.

If it is okay with you, I think I would like to go on to Desert Shield and Desert Storm and talk about what we did. I would be happy to answer any questions on Panama but I do not think you want a big lay down on it. I would start with the results. Looking back, it looked like an easy war but if you came and talked to me and my comrades back in August and September, it did not look very easy from that perspective.

We were facing the fourth largest army in the world, a lot of relatively modern equipment. They had a lot of T-72 tanks. They also had a lot of T-62s, T-54s. It was a hodgepodge army—incidentally, a fairly large air force of almost 1,000 aircraft of all types. Had they been well trained and determined, they could have put up a pretty good defense.

As it turns out, they did not. One of the reasons they did not is that our offense was pretty darn good and all force is relative. It is relative to the amount of force, it is relative to the equipment, it is relative to a million things that computers cannot measure, like moral fiber and determination and leadership and things of that nature. So I think in looking back, yes, the battle looked easy but that is because the battle is over. Looking forward, it looked like it might be pretty hard.

The Kuwaiti Theater of Operations is defined as Kuwait, southern Iraq and a little bit to the west of Kuwait in Iraq. We took on that army and destroyed about 75 percent of its equipment—more than 3,000 tanks—60,000 people surrendered very quickly once the

war began. As a matter of fact, the numbers got a little bit fuzzy after that because it was just logistically hard to count all those people.

Interestingly, we had some tank engagements—that is something that interests me—at 2,700 meters with the M-1/A-1 tank confronting the T-72 tank and that is sort of our latest best against possibly their latest, although allegedly the Soviets have a T-80 tank. Our tanks were getting first round hits using the FLIR sites, forward looking infrared, the thermal imaging sites, and I am told that the Iraqi tanks could not even see our tanks. There was haze, dust on the battlefield.

I think that indicates pretty clearly—and that is just one example—that high technology works, that high technology did work. We kept a close eye on equipment readiness rates during the war, understandably, that were from a perspective that was pretty far removed.

As I recall, every major system in the theater, after possibly a couple of initial bumps, had about a 90 percent or better operationally ready rate—with the exception for a period of time of the improved TOW vehicle which, as you know, was older, and was something that was put together to fill a gap, not necessarily a clean development. But actually that was eventually improved, too. So high tech worked. Their army did not work very well because of that high tech.

Interestingly, Saddam Hussein had spent a third of his GNP throughout the decade of the eighties on his army, on his military—when I say “army” I mean it in a generic sense. He got very little for that. Tragically, Iraq could have been healthy, wealthy and wise if he had spent that money more intelligently on the nation as opposed to on the military.

I was talking to a senior Arab individual on an airplane just a couple of weeks ago and he made a very interesting analogy. He said the army is the like the fist. But in Iraq, it was not the fist, it was the whole body and the body had become weakened. If the fist is not a part of a strong and healthy body, then it is not going to do you very much good, and I think there are lessons in that.

Iraq had an air force that elected not to fight, essentially. Interestingly, during the Iran-Iraq war, it seems that the measure of effectiveness for that air force was in not getting airplanes shot down. So they pretty quickly learned if you do not close with the enemy, you do not get airplanes shot down. What you did in the past is probably what you are going to do in the future. They came up initially and confronted systems that were better and most importantly pilots that were better. They had disastrous results the first couple of days and from there on in they just did not get back into the battle.

A great advantage for us was that they put an armored army in the middle of a desert without air cover. That is something that is almost unbelievable but that is what they did and when we initiated the bombing campaign, of course, the results were quite good.

Throughout the war we were—I would not say “criticized” but we got a lot of pointed questions from the press on the BDA, bomb damage assessment; why we were not more forthcoming, why we did not have better figures and why we were not saying more

things were destroyed. The simple fact is that what we were announcing on a daily basis or whenever we got the figures in from the theater was the best information that we had. We were conservative in estimating enemy damage but I will give you an example of why it is wise to be conservative.

If a bomber comes in and drops his bomb and it goes off, the pilot claims a kill because all he saw was a big blast. Later on, when something that takes a picture goes over there, that blast might have occurred ten meters from the tank it was aiming at so the tank might not be destroyed. For that reason, we were quite conservative in what our estimates of damage were. As it turned out, we were estimating at about the time the ground war began that about one-third of the enemy force in the field had been destroyed. As it turned out, that probably approached one-half but we were not sure of that. If you are going to make a mistake, that is the side to make it on. Estimating that you have destroyed more than you have could be disastrous.

I think that the reason for the victory all stemmed from one font, and that font was the objective that was enunciated by the national leadership, by President Bush. There are nine principles of war and I am not going to bore you with them, but every military expert in the world concedes that the most important of those principles is the principle of the objective and if you do not have one that is enunciated, that is clear, that is achievable, then you probably are not going to be successful in a war. I think that is the case of the United States in VietNam, by the way—the mission there was just go hold them back as opposed to go get them.

The objective as enunciated for the Persian Gulf War was to eject the Iraqi army from Kuwait, destroy its offensive capability to threaten other nations and provide for stability in the Persian Gulf region. It is my strongly held belief that all of those objectives were achieved. I think they were achieved for a reason.

I think right now there is a confluence of ability available at the national level. I think there is a brain trust and I think that consists of the President, the Secretary of Defense, the Chairman of the Joint Chief Staffs, Colin Powell, Secretary Baker and National Security Advisor Scowcroft. That is an assertion and an opinion, I understand, but that is a very, very bright group of men and they have what I refer to as a kinetic brilliance.

They have not only the ability to see well, but to take the action that is necessary as a result of that, there being a lot of people who are very intelligent that do not know how to take action. These men know what to do, when to do it and how to do it and have the courage to do it.

Of course, the reverse of that is they know what not to do, when not to do it, how not to do it and have the courage not to do it. I guess what I am saying really is if you are going to have a fight, let us pick it. Let us make sure we have selected something that is achievable and then let us go for it. Let us not fool around.

Incidentally, there have been questions of why you fight a war, why you fought that war, why you did not pick another war. You can look around the world and there are many examples of places where things are going wrong. I would like to tell you in my view why we fought that war and I am not speaking for anybody be-

cause these are my opinions. But first you had a small friendly nation that was attacked by a dictator. When I am talking to civilian groups, I say a rapacious dictator.

That nation had been friendly to us and, as you know, Mr. Chairman, as you look back to the events of the Persian Gulf in 1988 when we were conducting the escorts of the oil tankers in and out, Kuwait was extremely key in that effort and it possibly would not have been successful without them, so they were good friends.

As has been testified, we had no treaty obligations to Kuwait, but that really was immaterial. It is a question of what is happening to Kuwait now and what are we going to do about it. The United States is a very strong nation. Apparently there were some, to include Hussein, that did not think the United States would use its power.

It is interesting to note, by the way, that if the world, if the U.S., if others had done something in 1937 the way we did here, maybe 50 million people would not have died in World War II.

But I think the real problem was that when he took over Kuwait, when Hussein took over Kuwait in a very efficient military operation—you have to consider it was relatively unopposed—he possessed 25 percent of the known oil reserves in the world. If he had gone down the coast of Saudi Arabia, just that narrow strip, another 250 kilometers, he would have had 45 percent of the known oil reserves in the world. At that point he really could have afforded to become Mr. Nice Guy and sold that oil at world market prices with no problem. He could take the \$80, \$100, \$150 billion a year he would have gotten for that and put it into his real hobbies, which were nuclear, chemical and biological weapons so that in 5 years or so, instead of representing a regional threat, Hussein could have represented a world threat. I think he had the kind of mentality that would have driven him to that, that is why I think that action was indicated in the Gulf.

I also think that the west has to be a lot more careful about what high tech military information and equipment wind up getting sold to people of that ilk so they can then threaten the world.

I'll talk about intelligence as it has been criticized. I found from my perspective the intelligence on the war was superb. There were a couple of gaps and I will address them but I knew what the Iraqi army was doing every minute. As a matter of fact, on the first of August, as you know, the intelligence community went to Watchcon I, indicating that an attack was imminent. You will recall, the Iraqis were asking the Kuwaitis for, I think, \$27 billion, the southern tip of the Rumaila oil field, Bubiyan Island and the other island, the name of which I do not recall. I remember telling the Chairman at that time that this was a shakedown, that they were not going to attack. That tells you how smart I am.

I also told him on the 2nd of October 1989 that there was not going to be a coup in Panama, that I did not think they had things lined up well enough. The coup occurred on the 3rd. So you have to understand—

Mr. DICKINSON. So much for intelligence.

General KELLY. No, the intelligence was there. It was my reading of the intelligence. Interestingly in Hussein's case, had he shaken them down he probably would have gotten everything that he was

looking for and been better off than he is right now. But we would have had a future problem, so maybe things worked out right in the long run.

The intelligence guys did pretty well. Did very well. I think that there was a positive feedback between Washington and the theater. The intelligence that I am talking about is the intelligence that I got from DIA and NSA. All the rest of the input—I do not know where it came from so I cannot comment on any other intelligence agency that was involved. But we knew very well what was going on just about all the time. I think that we probably underestimated the SCUD threat and I think that is abundantly obvious.

We did not correctly estimate the intentions of the enemy, or at least I did not, even though the intelligence community said they were going to go. That is pretty tough to do. You have a country that masses on its own border—there is not much you can do about that because they have not committed a crime yet. Could intelligence have done better? Sure they could have. Could operations have done better? Yes.

I think that a continuing assessment—we do after action analysis—is required and from that we can derive any changes that are necessary in the intelligence field; but I really do not feel competent to address them. I felt at all times that I had a reasonable amount of intelligence. I was never satisfied but there is never an operations officer—never has been in the history of the world—that is satisfied because what you are looking for is utter reality. That does not exist.

I have a few heroes in the world—by the way, not very many—but I have to tell you that one of my heroes is my boss, Colin Powell and, incidentally, his boss, Dick Cheney. That is a brain trust all in itself, the likes of which I have never seen before. But General Powell has a great deal of vision.

An example of that—and I am not sure of all these facts but I will relate it because it is my understanding of the facts. He assumed the chairmanship, as you know, in October of 1989 and immediately got introduced to the NFL. That was on a Friday and I called him at 2:30 Sunday morning, late Saturday night and gave him the first dose and that had to do with the coup in Panama. We worked all night and all weekend, which is normally what we did on weekends.

But along about December of that year, he told CENTCOM that he was not satisfied with our planning for the Persian Gulf region. Our plans up to that point were to counter a thrust south from the Turkistan MD into Iran or the Transcaucuses MD into Iran, because that had been a traditional threat.

But he told them that he was concerned about the defense of the Arabian Peninsula and that CENTCOM had better do something about it; there was a need to come up with a plan. So they went to work in the operations sphere as opposed to the strategy sphere and did come up with that plan. I believe Central Command had just completed a CPX, a major CPX, right before the invasion occurred and it is that kind of vision, I think, that characterizes General Powell as a great, great leader.

The leadership was able to go brief the President on the 4th of August about what our capabilities were and what the requirements were and that in fact happened.

I sat in on a briefing but I did not sit in on the deliberations. That was restricted to a much smaller group but obviously the decision out of that get together was that we would go to Saudi Arabia. However, the United States did not have the Saudi's permission to do that so that the Secretary of Defense and General Schwarzkopf along with some others, to include my deputy—he got to go twice, I did not get to go at all—went over to Saudi Arabia to talk to the Saudis and gain their acquiescence on committing U.S. forces there. It is key to remember that we were saying, "Hey, we are here for the long haul—we are not going to send a battalion over and then pull them out the minute they get shot at." Saudi Arabia had never allowed foreign military forces into the country before; they were not sure really how it would be received. I think Secretary Cheney left on the 4th, talked to them on the 6th and got permission to do it. Very surprising.

I later talked to the same senior Arab who told me the Saudis had actually made that decision on the 3rd, which indicated that they could read a map, too, and recognize what the threat was.

So he came back and I recall clearly—it was six o'clock at night, roughly, on the 6th which was a Monday—that the Chairman walked in and said, "It is a go" and that the President had been briefed and he approved the plan. So we had the execute order all ready to go. We had to get that approved by Mr. Cheney and as you well know, every deployment and every commitment of U.S. force must be approved by the Secretary of Defense, at least—major force, of course, by the President. That is the way we maintain control over the military and everybody who wears a uniform believes very deeply in that.

The Secretary of Defense approved it, we got it out about 8 o'clock that night so that C-Day became the 7th because we use Greenwich mean time and one o'clock in the morning is eight o'clock at night in Washington, so the 7th became C-Day. I like to tell that story because it amuses me.

We immediately deployed forces. The strategy was to get something over there, first some air-to-air, then air-to-ground, then some Army on the ground to help protect that force; and the command and control capability to begin to direct it and continue the build-up. The first increment, as you may know, was about 200,000 roughly—I think 204,000—which we thought we could get in the country by very early in December.

I watched all this very closely and I must tell you that I have never seen a more professional response than the one that was provided by all the services; but in particular and especially by the Air Force. They got the airplanes out and the lead squadrons arrived on the 8th, three of them—two F-15C and one F-15E, the E are the ground attack versions.

We cranked the 82nd Airborne up, incidentally, and sent them over. That was not the unit of choice but it was the only unit we could get there very quickly. We had already moved the Independence battle group into the North Arabian Sea before the conflict began. Then the Marine maritime prepositioned ships off of Diego

Garcia and Guam were steaming toward the country so that things were beginning to close.

But getting back to the Air Force, not only did they conduct the most precise strategic bombing campaign in the history of the world, they maintained the equipment superbly, they got it there on time, every time, into the country; it was just a magnificent effort. In my opinion, the Air Force really came of age during this conflict. The Army, Navy and Marines came of age a long, long time ago, I am fond of telling my Air Force friends, but that was a pretty respectable effort. Incidentally, Navy air, Marine air and Army helicopters played a very significant role but I think the lion's share was carried by the Air Force and I think they can be very proud of what they did.

We began the build-up. It is my opinion that by about mid-September the window was closing on Saddam Hussein. As you recall, he had sent the Republican Guard down to the southern border right after they had taken Kuwait City so an attack into Saudi Arabia was not some wild dream that somebody had, it was possible. I would say that by mid to late November the window was closed all the way.

Now, really in point of fact, the window had closed the second the President made the decision to respond. The question really was how much pain could he inflict on us, not whether or not he would eventually win that war. I do not know what was in his mind—a country of about 18 million people with about 3.5 million Kurds was agreeing to take on unquestionably the most powerful nation on earth along with 29 other nations. It did not make any sense at all and I can recall thinking to myself any number of times I do not know what he is about.

But whatever it was, (A) it turned out bad for him and (B) one of the advantages we had in fighting him was that he was not very bright and his strategy was not very good. He watched us build up and he built his Maginot line in the southern desert which had a totally exposed left flank. You did not have to look at a map for a long time to decide which way to go, and so we did.

At the risk of being a martyr, I would like to just comment on some of the pundits who were informing the American people prior to this time. As you recall, some of them were saying the military is too old and cannot fight, the equipment is too sophisticated and will not work, the Iraqis are too tough, we cannot take them on and by the way, we had better listen to another major world power who was counselling caution because they are a super power. All of those things, of course, turned out to be utterly wrong.

What we found with the Iraqi soldiers, I think, was that they were not battle tested, they were battle weary. They were tired, it was awfully tough on them and I really feel very sorry for them. I also think that certainly everything needs to be discussed but people should understand that the intelligence available to the national leadership is greater than what is available to the average American.

As a matter of fact, there were those who said keep the interdiction regime going longer and give it a chance to work, that type of thing. My own opinion was that it was a very successful effort but it could have been years before it was successful enough to bring

that guy to his knees. I think subsequent events proved that. Time was not our friend in that regard because the coalition was perceived to be fragile at that point. I think it turned out it was not as fragile as people might have thought it was and we did not know how long it would hold together. I think the President did the right thing when he decided to initiate combat on the 17th of January.

Something else I think was exceptionally significant and I know it is not even subject to question. Never before had the U.N. gotten together at the Security Council and passed 12 resolutions that were really world referendums on doing something about Saddam Hussein to include one resolution that said you can use military force to drive him out after the 15th of January. It had never done that before. I think that was extremely significant.

I think the logistical achievements of the U.S. as always were spectacular. I think there is no question, by the way, that the American people own by far the most capable military force on earth. We have not been wont to say that for a long time, it seems to me, from about the Korean War on but the fact is we are by far the best. Nobody else in the world could even approach what we did, not only in terms of the ability of our soldiers, marines, sailors and airmen to fight, but in our ability to get them to the fight. I think our deployment capability is something that has to be nurtured in the future.

But what was done with Increment One was equal to moving the city of Richmond, VA 7,500 miles to the Persian Gulf to include all of the people, all of their clothing and equipment, all of their tools, all of their automobiles and everything else. That was spectacular.

When that was completed, we came in with Increment Two, which was primarily the 7th Corps from Europe and the 1st Infantry Division from the U.S.; that was the equivalent of moving Des Moines, Iowa with the same stuff all the way to the Persian Gulf. Logistically, that was a pretty remarkable performance.

I have been asked if there was anything wrong with it? Certainly there were things wrong with it. We really had to scramble to get ships, as you know. I think something like 25 percent of the ships used were not U.S. flag ships. In the future, if there was a closer balance politically around the world as to who was right and who was wrong, it might be a little bit more difficult to get that deployment capability; so I think that has to be looked at very closely.

As a soldier who is totally dependent on the ability of the other services to move him to the battlefield, I am concerned about things like the fast deployment ships which I think did a great job. I am concerned about things like the C-17 aircraft, which I think would give us a great capability and I think they are necessary in order to maintain our capability to react. To sum it up, I think that the success of the action was spectacular. It was not all due to the fact that we had an inept enemy. We did a lot of things right and that tended to make the enemy appear to be more inept. I think American technology proved itself clearly.

We went over there with the most complicated equipment in the world and it worked beautifully. We flew, as I recall, 110,000 sorties and lost fewer than 30 aircraft. It would be impossible, I think, to run an exercise of that many sorties and lose fewer aircraft than that. So that was a real accomplishment.

Something I talk about often is that American youth are probably the most criticized group of people in the country. You read in the paper every day about how lazy and indolent and self-seeking or self-serving they are, et cetera, and they have a lousy education system. That same youth from mainstream America, which is what we are getting in the service, went to the Persian Gulf and operated the most sophisticated equipment ever devised by man flawlessly. So I think that (A) the American youth can be proud of itself and (B) we, the people of the United States, can be very proud of them.

I think there were three legs on the stool that insured victory: the first was the leadership, which I have talked about; the second the men and women who I have talked about; and the third leg I did not talk much about but that was vital, was the support of the American people. I can guarantee you that it was felt deeply by the soldiers in the theater and I can guarantee you that when it is not felt deeply it is missed sorely. I am talking about Vietnam and we did not feel it there. So I think the support of the American people was vital in the victory that was achieved.

I am ready to answer any questions, sir.

The CHAIRMAN. General Kelly, thank you very much for that very, very interesting statement and we would like to have some questions.

Let me just tell the Members of the committee that General Kelly needs to leave here about 11 o'clock so we will just go to questions and then when we run out of time, we will end the program.

Bill Dickinson.

Mr. DICKINSON. Thank you, Mr. Chairman.

General, I do want to thank you for your statement here. It is very, very meaningful for the committee and it certainly is to me.

Let me ask you something that you might be reluctant to comment on, maybe you are anxious to comment on it. One of the things that I have been told privately is that the Navy, while performing admirably, had 50 percent of their aircraft dedicated to protection of the ships. They had very few over target for the total number that were on the strike force. Could you comment on that?

General KELLY. Yes. I do not know what the specific numbers were and about the 18th of March I turned in my clearances so I cannot even get them. But first, in the overall campaign, of the 110,000 sorties, as I understand it, about one-third of them were support sorties, about one-third of them were air defense sorties and about one-third of them were ground attack sorties.

A certain number of aircraft off the carrier are responsible to protect the carrier. We had six carrier groups there, as you know. It may be that a large number were required to protect them.

But then you have to remember—and I do not know who is doing the talking—we did not get into a tight spot there. Had we gotten into a tight spot, those aircraft could have been rearmed with air-to-ground weapons as opposed to air-to-air weapons and been committed. Beyond that, normally the F-14 is an air-to-air fighter, it is not ground attack. Of the A-6s and the A-7s, only the Saratoga had the A-7s as I recall, for ground attack. That meant that the swing airplane was the FNA-18 and I do not know that the Navy

had that many there. I would have to look it up. I know the Marines had a lot but they were doing ground attack work. From my perspective, we never asked the Navy for anything that we did not get, so I was satisfied. If there was a problem there, I was unaware of it. There are a lot of things that go on in the theater of which you are unaware back here.

Incidentally, I would mention one more thing. The way we do business is different than most other nations. Once the policy is established and the parameters are laid out, we give our commander in the field more authority than just about anybody else does. One of the difficulties I had as J-3 was other countries asking me for what our decision was on things that they were trying to make a decision on. I had to tell them we do not do that here, we do it out in theater—General Schwarzkopf and his folks are the ones that do it. I think we are right and they are wrong but I just point that out.

Mr. DICKINSON. Well, I know that there will be a statistical study coming later and we will validate who did what and how many aircraft were committed and so forth, but I just wanted your personal input.

General KELLY. It is very important to remember that one of the major contributions that the carriers make is that we can use them in peacetime. You cannot use the Air Force in peacetime without the permission of another country, so we get a lot out of those carriers. As J-3, I was always very, very interested in where they were and what they were doing.

Mr. DICKINSON. You are talking about airlift and—

General KELLY. Even combat aircraft. If you do not have a Saudi Arabia or another country willing to let you operate from there, you have difficulty with Air Force air. You can go anywhere early in a crisis with the carrier, so it is a method of projecting power that is very valuable to us.

Mr. DICKINSON. Well, just one more question, but not to monopolize the time. I would just ask your personal opinion—why do you suppose that Saddam Hussein stopped at the Saudi border? Now, he could have gone all the way in and had minimal resistance, sort of like Hitler at the channel there when he did not go from France into Great Britain. Obviously that was a fatal error on his part. Do you have any feel for that?

General KELLY. We have talked about it a lot. Incidentally, one of the things that I am very proud of is we ran intelligence and operations together on the Joint Staff so that Mike McConnell and I were really one set and our bosses got one product. Mike and I talked about it an awful lot—he is a superb intelligence officer, the best I have ever worked with.

Number one, the Iraqi army was a very deliberate army. When I say "army" I mean the military forces. They had never done anything very dramatic. In the Iran-Iraq war, they just lined up against each other and had at it. I think he thought that was what we were going to do.

Mr. DICKINSON. Just slug it out. That is what they did.

General KELLY. Yes. I think their military thinking had not quite reached World War I. The second thing was that they had never sustained a deep drive in their history. If you put the two

together, being very conservative and not having the logistical experience to sustain a deep drive, I think it made him pause. I think he also paused to look at what the world's reaction would be.

What baffles me is once he saw the world's reaction, once he saw thirty countries beginning to come in there, he did not pull out. I will never understand that. I do not know why he subjected his people to that.

Mr. DICKINSON. Well, the Chairman and I were over there 3 months ago or so and we got a pretty good briefing. But from that meeting even I did not understand what we felt was driving Hussein and I do not understand him now in dealing with the Kurds. He has world opinion against him. He can make any sort of agreement he wants to and then back out of it. I think that is probably what he will do if he gets in too tight a spot.

General KELLY. Yes, but he has had a taste of something now that was pretty bitter. I am not sure he wants to take another sip out of that cup, so maybe he will be a little bit more reasonable.

Mr. DICKINSON. Thank you, Mr. Chairman. I yield back.

The CHAIRMAN. General Kelly, just one quick question for the record and then let me yield to others. Do you see any way in which the Goldwater-Nichols bill ought to be changed? Do you have any recommendations to making any change at this point?

General KELLY. I have obviously thought about that. In terms of command and control, I cannot make any recommendation. I have watched the record of the two campaigns. I also read the very, very excellent paper that Arch Barrett put together. I think it was really good. Was this really a result of superb leadership or the bill? I personally think it was the result of both and therefore if I was being asked whether I would like to see any changes made to it—I am a tanker, one of our favorite sayings is if it ain't broke, don't fix it. So I would not.

As you know, Title IV has caused us some concern in trying to get from major to colonel, being eligible for flag rank and doing everything that you need to do—the most important of which is being competent in your own branch. If you do not have good battalion commanders, it does not matter how good a staff officer you are or how well you have been educated. The country is going to be lacking when it comes time to fight.

But I think those things are being settled by the process over time, so I think the bill is going very well. I think that the Congress and the administration and Americans can be very proud of that bill. I think in the future we will look back on it as a—

Mr. DICKINSON. Can I piggyback on that if you would yield?

The CHAIRMAN. Sure.

Mr. DICKINSON. Again, getting back to the intelligence aspect, though, your intelligence was good. The question is whether it should be short circuited to go directly to the theater instead of coming back here and then going back? Could you comment on that again?

General KELLY. Intelligence did not do that. It was going to both places at the same time. Most intelligence we got, by the way—except from certain systems which we do not talk about in open hearings—came from the theater and we had pushed every intelligence system imaginable over there.

Also, incidentally, the communicators did a superb job. We never failed to have 100 percent top secret code word communications capability with the theater so that the Chairman, the Secretary, the President and even me and my guys, my folks, could talk to them any time that we needed to. I will assure you that they had not only as much intelligence as we did, they had more intelligence and they were in the process of sending it back to us. They got the readouts at the same time we did.

The CHAIRMAN. John Kyl.

Mr. KYL. Thank you, Mr. Chairman.

General Kelly, I enjoyed your presentations during the conflict and this briefing has also been edifying. I had primarily just one set of questions. It really boils down to one key question of whether, based upon your experience, the role of the Chairman of the Joint Chiefs of Staff should be any different with respect to the operations aspect of a conflict like this. Now, let me put that a little bit in context.

He is not by law in the military chain of command and yet the way you described the brain trust, it certainly appeared that though he may not have been in the chain of command, he was in the chain of decisionmaking such that it would be almost a distinction without a difference.

I am just curious to get your analysis of the way Goldwater-Nichols, is now; whether there might be any adjustment that would be needed or whether just by tradition and practice changes may be occurring that may not be totally consistent with the way the law was written.

General KELLY. I do not think so. You would really have to talk to General Powell to get it from the horse's mouth but as a watcher, it seemed to me that the interaction between General Powell and his bosses, Secretary Cheney and President Bush, was very good; that the bill made him the principal advisor.

Incidentally, the Secretary of Defense exercised his authority through the Chairman of the Joint Chiefs of Staff; as a matter of fact, the Secretary of Defense has no mechanism to run the military because his military staff is on the second floor of the Pentagon, to include the Joint Chiefs of Staff, the JCS, and the Joint Staff headed up by the Chairman. His policy staff is on the third floor and that is comprised of under deputy and assistant secretaries who do the policy work.

General Powell was deeply involved in decisionmaking but did not have the final authority to approve the decisions. As I mentioned, you have to go get a chop from Secretary Cheney. This often, incidentally, involves middle of the night phone calls saying, "Sir, we have to send this over to the Gulf—will you approve it?" Unless there is some reason not to, he does, incidentally. It is my personal opinion that is a pretty wise way to do it.

As I say, you would have to talk to Chairman Powell and Secretary Cheney to find out if they feel any changes ought to be made but from watching the process and from considering the results, it seemed to work very well.

Mr. KYL. Mr. Chairman, I would like to follow up. This is a lack of knowledge on my part, but when you say the Secretary executes

the orders through the Chairman, what is the difference between that and the Chairman being in the military chain of command?

General KELLY. It is a nuance, I reckon, but right now, all authority is vested in the Secretary and the CINCs work for him. If you ask me to make a case to keep it that way, I could. If you ask me to make a case to change it so that the Chairman occupied a chain of command role, I could. All I am pointing out now is that the system in place appears to be working very, very well. I guess the issue would be: if you changed the players, would it continue to work very, very well. To answer, I think all organizations are based on the players so it is very important for the country to pick good people to put in those jobs.

The CHAIRMAN. Ron Dellums.

Mr. DELLUMS. Thank you very much, Mr. Chairman. Let me complement you for these set of hearings and welcome you, General Kelly.

This is the policy panel so it gives us an opportunity to think policy. I am not sure that the two questions I will raise fit neatly into the specific category of concern this morning, but I cannot resist the opportunity to raise at least a couple of questions with General Kelly; one looking back and one prospective question looking forward.

As you know, we are in the throes of a budget cycle. The B-2 bomber is clearly a very controversial weapon system. Some have articulated the notion that if we had had the B-2, that it would have been used in the context of the Persian Gulf.

My question to you is: do you agree with that notion? If the B-2 had been available, it would have been used to what purpose that was not already achieved by existing weapon systems? In other words, what would the B-2 have enabled you to do that you were not able to do with existing inventory?

General KELLY. That is a pretty good question. The first thing that comes to mind is the fact that we did not use the B-1. Now, the question is contextual because if you ask it when you have B-52s, the answer is that I had B-52s, they were good enough so I did not need anything else.

If you ask it after the B-52 is gone—at some point it is going to have to go, it has a long grey beard right now—then you might get a different answer. But we have 100 B-1s that are configured to carry conventional bombs. We felt no lack in theater for any weapon system.

"Would you use the B-2 if you had it" is a question that would require a lot of study. I would also tell you that, in my view, you are spending an awful lot of money for a conventional bomber and you are building an awful lot of capability into it for a conventional bomber; but it could be used if you did not have anything else. If you had something else that was cheaper and as effective—I am talking about dumb bombs with great precision but not guided weapons—I would use the cheaper system.

Mr. DELLUMS. I appreciate your response because you raised two points that troubled this gentleman. One of the stealthiest bombers in the inventory is the B-1 because it vanished off the radar screen for the last several months interestingly enough and it was not used. I had problems understanding how people would suggest that

we could have and should have been able to use the B-2 in that context when they did not even use the B-1. We spent \$20.5 billion on that weapon system. Number two, we were able to gain air superiority so quickly I could not quite understand why you want to use a weapon system as sophisticated as the B-2 in the context of the Persian Gulf, so I appreciate your answer.

The second question is a larger question and it is a prospective question. Perhaps this gentleman is wrong but I would like you to comment. I'll start with the quote that you made; it may not be an exact quote but I am paraphrasing. You indicated when you were speaking about the youth of America that in the context of the Persian Gulf, we used the most sophisticated weapon capability ever devised and it was used flawlessly.

I think that in looking at the Persian Gulf War, we as American people now have an opportunity to look through a window into the future. I think we have learned from the experience in the Persian Gulf that the battlefield of the future is going to be an even more sophisticated battlefield. You pointed out that highly sophisticated technology was a very dominating force and I believe that the battlefield of the future is going to be even more dangerous. The battlefield of the future is going to include even more sophisticated capability with greater lethality and we may need to expand the definition of the battlefield. With standoff capability, the battlefield may be intercontinental because of the capacity to wage war with missiles at great distances.

So as I look at the battlefield of the future I am both troubled and frightened because I perceive great danger. I envision great complexities because now people are in the business of wanting to buy weapons as a result of seeing the utilization of sophisticated weapons on CNN. They know exactly what to ask for: Do not give me the SCUD, I want the one that goes down Main Street, turns right and enters into a specific household. I want the smart bomb. I want the cruise missile.

In one sense, we know money and arms merchants are going to be out there selling weapons and so the potential for the proliferation of very sophisticated weapon capability complicates the world picture, produces greater danger and complicates our lives by virtue of proliferation as well as arms control.

I know this is a short time to look back at the Persian Gulf, but I am wondering as a result of all this high technology whether we have now rendered, for example, ground forces obsolete in the future? Have they become less significant and less important in the battlefield of the future because we have placed such a high reliance on sophisticated technological capability? Could you comment in general to my view of the battlefield of the future and what does that portend for policy decisions we have to make vis-a-vis military budgets of the future?

General KELLY. Yes. Let me just add to my previous comment, by the way. The F-117 stealth fighter had a superb perfect record over there, so it did us a lot of good.

You are asking a tanker if general purpose forces are really needed all that much in the future, so you are going to get a predictable response.

Mr. DELLUMS. Sorry about that.

General KELLY. I think that we have to be very careful not to draw the wrong conclusions from this war. If you had put the VC in those tanks and had triple canopy jungle around them, it would have been a very different war. We could have been there a very long time and that is why I think it was so wise to select the right fight, have the right objective and then to go after it.

High tech—there is no question it is going to play a major part in any future battle that we fight. It will give us great advantages in terms of strategic targets, in terms of logistical targets and certainly in terms of tactical targets. But maybe not as much if you are going to fight that kind of war in broken terrain. Remember he had an armored army sitting in the desert with no air cover. That is mindless. You just cannot do that.

We'd like to truly optimize the capability of the smart weapon—some of which, incidentally, are pretty darn cheap and very darned effective. The laser guided bomb, for example, is a plain old iron bomb with a nose stuck on it and some tail fins. I do not think it costs the taxpayers a whole lot of money.

Any force that I know of historically that has let itself get out of balance flirts with disaster. Defining what the balance is, of course, is an art and is the hard part. I think you have a team over there in the Pentagon that is peerless and they will be able to do that.

They have some tough decisions. To take the defense budget down to where it is projected to go and retain a balanced force that can protect U.S. national interests around the world is a job much tougher than I could cover this morning, even if I was an awful lot smarter than I am, which I am not. So I would say the ballgame is not over for conventional forces.

We need to continue to strive to find those combat multipliers that will enable us to conserve manpower, the most expensive component in this thing. The size of the conventional force is going to get smaller but there are a lot of places around the world where you are still going to need Joe with a rifle to go in and root the enemy out if you want to win.

As a matter of fact, even with all the high tech equipment, which kept our combat deaths below 200—I mean God bless them—God bless the Air Force and Navy air, Marine air and Army air—you still did not own it until you put an infantryman up there. We will never get to the point, I do not think, where you do not need the infantrymen any more.

What we need to do is try to find systems that make him more valuable, serve him better so that we can use him more as a last resort in the future than we have in the past. Our philosophy in the Army has always been use the grunts last, try the machines first. But sooner or later, you are going to have to go get them.

I am reminded of the Marine campaigns in the Pacific in World War II where they had to go into the caves to root the Japanese out. They have not designed a weapon yet that will do that.

Mr. DELLUMS. Mr. Chairman, I thank you for your generosity and realizing the shortage of the General's time, I would not proceed any further. I thank you for your answers.

General KELLY. Thank you, sir.

The CHAIRMAN. John Spratt.

Mr. SPRATT. Thank you, General Kelly, for your excellent testimony and for your performances on television. They were helpful to all of us. I think it was your ingenious style—everybody took you as believable, the way you presented it.

General KELLY. Did you say ingenious?

Mr. SPRATT. Ingenious.

[Laughter.]

Mr. SPRATT. You touched on the B-1 and I would like to go back to that. It struck me as odd that we did not use the B-1. We used the war as an opportunity to test tactically some systems that had never been tactically deployed before, the Patriot, the F-117A that had been used in Panama and the cruise missiles. Here was the B-1B bomber, we had a conventional bombing mission, we did not use it. Was that because we did not want to detract from the triad?

We had it committed to strategic missions, nuclear strategic missions? Or because we simply did not need it?

General KELLY. You would have to get the specific answer to that question from the Air Force. I think what the answer is that when we bought the B-1 for its primarily important mission was in the triad, therefore, we went for that capability first.

We had not gotten to the point where we had completed all of the loops that had to be completed to make it effective as a conventional bomber. We had plenty of B-52s anyway, therefore, we did not have to press any override buttons and start spending a lot of money to get the B-1 in there. I think that is what they would say. I think that is correct.

I think the B-1 will be available for conventional bombing and it will be a very effective conventional bomber; but in this particular case, we did not need it. We had plenty of other stuff so we used that.

Mr. SPRATT. You also mentioned airlift and you said it would have been helpful to have the C-17. What could the C-17 have done in logistically supplying you that the C-5 could not do in this theater?

General KELLY. It carries a whole lot more. I did not do any excursions on the Persian Gulf because I was gone by the time it was over but we did do one in Panama. In Panama, for example, we could only use two airfields in landing our forces down there. If we had had the C-17 we could have used four airfields because it is capable of landing on a much shorter runway than the C-141. Therefore, you would probably double your capability to put force into theater, given that you had enough C-17s to do it.

It also has an intra-theater airlift capability which would allow you to move many more things more efficiently within the theater. So it is a newer technology, it is a better airplane, it carries a lot more stuff, it is more efficient to operate and it can get into airfields that the 141 cannot get into.

Mr. SPRATT. But would that have been the case also in Saudi Arabia?

General KELLY. Intuitively, I would say yes although there were an awful lot of big airfields in Saudi Arabia. Maybe not getting into airfields as significantly. We used the C-130 as a primary intra-theater airlift airplane in that theater. The 130 is a great old

airplane. It is a classic. It does a great job but it cannot compare with the C-17 in terms of its ability to carry things.

Mr. SPRATT. You also touched on a sensitive point with respect to sealift. We relied significantly on foreign flag ships and they might not be available if the political situation had been dicier. Does that indicate to you the need for more fast sealift in our inventory?

General KELLY. It needs to be looked at in balance. I am not saying that to avoid your question because I am going to answer it in just a second, but balance is always the toughest thing to achieve in life whether it is in a defense budget, in the social welfare services or in playing with your checkbook at home. What are you going to give up in order to get what it is you want?

Having said that, I think that we need to take a very, very close look at fast sealift because those ships were vastly more capable than any other kind of ships we had. For example, I believe it is correct that the 24th Infantry Division from Fort Stewart loaded out in a weekend down in Savannah. They were only able to do that because they were using the fast sealift ships where you just drive the tank on the ship full of ammunition, full of fuel, chain it down and you keep doing that until you get a division's worth and you go.

That is a stupendous capability as compared to using older, smaller, slower ships and I think the fast sealift ships go about 30 knots. You can go a lot of places in the world very quickly at 30 knots.

Mr. SPRATT. Thank you very much.

The CHAIRMAN. Ike Skelton.

Mr. SKELTON. General, we thank you for your appearance this morning. I miss seeing you on television.

General KELLY. I do not necessarily miss being there.

[Laughter.]

Mr. SKELTON. You not only did a superb job, I think what you did overall is to inform the American people that those in uniform are competent and professional. You were a personal reflection of that and your message was just that so I complement you on the superb work that you did insofar as informing the American people. I know your duties entailed much more, but that is what we saw and we thank you.

The most important thing I think you have said here today is something about the caliber of the young people. How do we keep young men and young women of that high caliber interested in coming into the military—not necessarily to make it a career, although you need the cadre of those who aspire to make a career of it to stay—how do you do that?

General KELLY. Well, I think we are doing some things right now. I was blessed to command Fort Dix for 3 years. That is a training center that 140,000 young folks come through. They join for a whole lot of different reasons but they fell into categories. Some of them were patriotic, some of them wanted a challenge, some of them wanted the training but I think the biggest single thing from my perspective is that we have a lot of young Americans who do not have a lot of advantages.

We do not have the most advantaged Americans in the service but it is the deepest belief I have that we have the cream of the

crop in the service because they are the ones that really want to do something. They want to make something out themselves, want to get off the streets—that is where I came from—and joined the service because they saw a way to do that.

So I say that the college fund is one of the major, major things that draws high quality young people into the service and keeps them in. Some will stay for a career, some will not. I would tell you that if a soldier joins for 3 years, male, female, black, white, Hispanic, Oriental, what have you, and takes advantage of his training, gets the college fund, gets out, and goes to college, that is a net profit for the United States of America and I believe it is a very, very good investment. So I think that we need to continue that.

We need to continue selling the challenge. We are getting good folks to come into the Marine Corps and the Army and go in the infantry. Special forces probably has never had a better recruiting environment than they have had over the past several years, not just since the Gulf.

I think you will note that lately you have not seen a lot of recruiting ads on television—I have not—and I think that is because a lot of people are joining up now. I think that there are a couple of very key things that have occurred over the past 10 to 15 years.

The quality of the NCO corps has just gone out of sight and the NCO education system has been the single major contributor to that, in my opinion. We did not have an NCO education system, as you will recall, back around Vietnam and it took a couple of years to get it off the ground. Some of the senior NCOs thought you sent Sergeant Jones to BNCOC or PNCOC or whatever the acronym for the school was, in order to take a weak guy and make him better.

We have now convinced them to send your best guy to make him better so he comes back and has a positive influence on the institution. I will tell you—you take the top three grades today, the sergeants major, first sergeants and master sergeants, they can do anything. They are magnificent.

I also think the officer corps is a lot better than it was. A kid who joins the ROTC today joins because he wants to come in the service. He does not have to worry about getting a draft deferment, as they did when I joined the ROTC.

So they are committed—I am talking about the Army because that is what I am in. It goes back to a guy named DePew who was the visionary who started the renaissance in the Army. We now have doctrine which we did not have when I was a young guy. We now have leaders who know what they are doing. We did not always have that when I was a young guy. We now have the national training center which is a graduate course for armored warfare in the desert, which we did not have when I was young guy. I can recall talking to a young captain out there when I was assigned to the 5th Infantry Division from Fort Polk and he told me, "Sir, I have learned more in 4 weeks out here than I did in my previous 6 years in the Army."

Those kinds of things are getting people to join and keeping them in. Soldiers never complain when they are working hard doing what it was they joined to do. They always complain when they are doing rag maintenance or pulling detail or doing something like that. The environment in the services and the leadership

in the services is a lot better and I think that will keep them joining. That will be a great payoff for America whether they stay in or not.

Mr. SKELTON. Thank you for your comments on that.

General, you were the J-3, correct, of the Joint Chiefs?

General KELLY. Joint Staff.

Mr. SKELTON. You are familiar with the proposed cut in the overall forces over the next 5 years.

General KELLY. Yes, sir.

Mr. SKELTON. Army divisions come down from 18 to 12, National Guard divisions come down from 10 to 6 with the creation, as I recall, of two cadre National Guard divisions.

In your opinion based upon your experience in your position as J-3, could we carry on a Desert Storm as effectively and within the same timeframe some 6 years from now, assuming the cuts come to pass? Also what would happen should we have 6 years from now a Desert Storm conflict come to pass and at the same time a major eruption such as Korea or somewhere else in the world?

General KELLY. An extremely difficult question to answer. I know you appreciate that. I will take a shot at it.

We would have great difficulty doing Desert Storm 8 years from now, 7 years from now as we did it. However, that does not presuppose improvements in deployability, improvements in readiness, improvements in equipment, those kinds of things and I think that is what we have to strive to do.

Also, 7 or 8 years from now, we should not have the European dilemma to face that we have had for 40 years and so some of those forces will become available. We did not use all of the Army forces that were in the Army in order to support Desert Shield. However, if you hypothesize that you are going to have something like a Korea at the same time you have a Desert Shield, I think it would be difficult to the point of approaching impossibility to do with the force structure that you outline. Incidentally, that program is going to be reviewed five or six more times before it gets executed and, as the situation changes, opportunities to change it are available.

I think that that is being worked very hard over in the joint staff, in the services, and in OSD and they will come back and make recommendations. I would be very chary about giving you one person's opinion on it without the kind of discipline that would have to go into that opinion in terms of study and of what the situation is.

The short answer is it would be awfully tough to do 5, 6, 7 years from now with the force structure that you outline. However, improvements could and should be made.

Mr. SKELTON. Thank you.

The CHAIRMAN. Beverly Byron.

Mrs. BYRON. Thank you, Mr. Chairman.

General Kelly, once again, I join with my colleagues in thanking you for your outstanding service and more importantly for giving an opportunity to the American public at home to understand what our military capabilities are and what they were.

General KELLY. Thank you, ma'am.

Mrs. BYRON. It makes my job as Chairman of the Personnel Subcommittee a great deal easier. I have had numerous people and col-

leagues of mine that have said, "I never really understood but today I do. It has been explained to me in layman's terms." So for that I want to thank you.

I have watched Goldwater-Nichols evolve and seen the difficulty in certain areas of meeting those criteria. One area that Admiral McKee and I worked on very hard with Congressman Nichols was in the arena of the nuclear Navy—not a submarine force basically and not a high player in Desert Storm/Desert Shield. But it is an area that has concerned us because we do not have the depth within that specific branch of the service to get that joint service early on as mandated under Goldwater-Nichols.

I think that has to be an issue that we need to look at, not in today's hearing structure but as we look at where we are going under Goldwater-Nichols.

The other issue that I would like you to touch on, and I apologize for being late—I do not know whether you have touched on it or not—is the ease with which we went into a multi-national force. Working together as a cohesive unit obviously had to be made a little easier by the fact that our joint task force had become used to working as a cohesive force.

Could you touch on those two issues?

General KELLY. Yes, ma'am. Subject one—the nuclear Navy, especially the submarine Navy is what you are getting at, is one that is unique. The role cannot be duplicated, therefore you have to have them. Now, what numbers are in it is a separate decision but you have to have them.

Can a Navy person, whether he is a chief or a ship captain or an admiral, do everything is one that has to be looked at very closely. I do not pretend to be an expert on it. I know my Navy friends are very concerned about it. I know there are some byes that a nuclear mariner can get from the Goldwater-Nichols requirements.

It would be my opinion that that is a necessary thing to do and I think because they serve the way they do, they should not be stopped from progressing just because they were serving the nation as a nuclear officer and they have to be extremely well trained.

I cannot go further than that because I do not know what all the details of the training are. I realize that, on the other side of the coin, you do not want to make a flag officer who is a generalist out of somebody who was such a specialist that they cannot do the job. I have not found that to be the case with the nuclear mariners with whom I have worked, and I worked with a lot on the Joint Staff.

In terms of coalition warfare, it is always a thrill. I have served in NATO which has been in business for a long, long time. It is still excruciatingly difficult to get some decisions some times out of that august body. However, there are two kinds of problems: there are peacetime problems and there are wartime problems and sometimes when you load the guns, some of the peacetime problems tend to go away.

I think it was that sense of immediate——

Mrs. BYRON. Especially if you own the guns.

General KELLY. Ma'am.

Mrs. BYRON. Especially if you own the guns.

General KELLY. Exactly. If the empires are also armed, which they were in this particular situation.

I think the cooperation between all of the forces of the coalition and especially those that were under the command of the Saudi forces was spectacularly good. It was definitely cooperation because, as you know, General Schwarzkopf did not have command over those forces. But something helped that process a great deal.

Our U.S. special forces worked with those Arab forces from very early on in the campaign as facilitators, as language training people, as liaison personnel and assisted in training. I think that paid great dividends when we finally had to go to war. Incidentally, one of the bright parts of the campaign from my perspective was how well those forces did, not that I should not have expected them to do well but it is always pleasant to see some pretty good fighting folks.

I would say to you, incidentally, that the battle at Khafji was far more significant than possibly we realized at the time and that was largely an Arab operation. I recall one vignette where five AMX-1 tanks manned by Qataris came into conflict with five T-62s manned by Iraqis—I am not certain T-62s—and the Qataris destroyed four of the Iraqi tanks, damaged the fifth and did not take any damage themselves. That is pretty darn respectable.

So the Arab forces performed pretty well and that is great. The cooperation was superb and I also think that the intelligence in breaking out the corps sectors the way they were broken out and having an Arab command in that center sector was quite wise.

Mrs. BYRON. Was the fact that we had the joint effort among the four services under Goldwater-Nichols—was that not key to transpose it over into other nations?

General KELLY. I think so. First in using it among ourselves because it was great cooperation—I do not know of a single problem that erupted among Americans over there as a part of the command and control and there were very, very, very few that erupted among other nations in the coalition; so I think it played an important part.

Mrs. BYRON. Thank you, Mr. Chairman.

The CHAIRMAN. Buddy Darden.

Mr. DARDEN. Thank you, Mr. Chairman.

General Kelly, welcome. It is a pleasure to have you here today. I do not have a lot of questions to ask you. I heard you on Larry King Live and I think you answered about every question I had for you on that night, but I certainly enjoyed that. I want to say to you that we are certainly proud of the way you comported yourself during the Gulf War.

You will always be a part of what we all think of when we remember anxiously awaiting the briefings from the Pentagon. I merely want to say we appreciate your service to our Nation and we wish you well in your new career.

Thank you, Mr. Chairman.

General KELLY. Thank you, sir.

The CHAIRMAN. John Kasich.

Mr. KASICH. Just one question, General.

There has been a lot of controversy about the way in which the media covered the war. What is your sense about how the pool

worked? Do you think that we learned anything from this? Where do we go if, God forbid, we get into another situation? How do we work it out?

General KELLY. I think we are getting better. To go from Granada to Panama to this conflict, I think the relations with the press have improved. I think the press did a very good job informing the American people.

There are two questions that could be asked: Question one—was the press satisfied with the information they were getting? The answer is no because they will never be satisfied.

That is not an unhealthy thing and during wartime when there is a requirement for security, there will always be some conflict between the press and the institution where the two come together. I think that is sort of a healthy thing.

But the other question you asks is were the American people adequately informed? I think the answer there is yes and I think they believe that; therefore, the press and the Government did a good job.

Something that has to be remembered, incidentally—I talk to a lot of press groups, I always ask them how many have read the First Amendment to the Constitution and it is kind of surprising the response you get. I ask them if they know about censorship during World War II. It is kind of surprising the response you get because there was censorship during World War II, military censorship. But balanced against the First Amendment is Section 2 of the Constitution which says the President is the commander in chief and he is responsible for two things. He is responsible for force security to the American people and he is responsible for victory. No other institution in the country is responsible for those two things, and I mean the Government in a broad sense is responsible for them. Therefore, the Government has the right to keep some secrets; the press has the right to probe as much as they can and inform the American people.

I think in the main it went pretty well. You could probably find some specific problems in country with press pools and things like that but I think one of the most able men I have ever met, Pete Williams, will work that out. I would also add that in Vietnam I am told either we had 150 or 500 reporters—that depends on who you talk to—but I will tell you in Saudi Arabia we had 1600 and that represented a logistical problem.

Mr. KASICH. Let me ask you one or two other questions.

I just wrote a letter to the President along with a handful of my colleagues that went to Kuwait City right after the war and it said that the United States should pursue internationally the prosecution of Saddam Hussein for war crimes. Do you agree with that? Even if we do it in absentia?

General KELLY. Yes. I think he should pay for what he did. The dilemma I have is how you get your hands on him.

Mr. KASICH. Well, we did not get our hands on Martin Borman.

General KELLY. Yes.

Mr. KASICH. Do you think that the world should begin proceeding on that?

General KELLY. Yes, I do. I am not a lawyer, an international lawyer, as you understand.

Mr. KASICH. Neither am I. That is a plus.

General KELLY. But as a citizen, I do not think he should get off.

Mr. KASICH. The second question I have for you is this. We did not move against Saddam Hussein and we end up going to war. We got through it with losing few people on our side but he lost a ton of people.

We are now in a position of where we are seeing Kim El Song, they are estimating, within 3 to 5 years having a nuclear weapon. Do you think the world community or the President should begin to rally the international organizations so that, rather than us ending up in war, we make it clear to him that if he continues to do what they are doing, the world will not tolerate it and we will take action?

General KELLY. I think that would be a very good cause for the U.N. to take on. Politically, I simply do not know the answer to that question here in the United States. I frankly have not thought it through because I have been busy doing something else.

But I made some comments earlier—you may not have been here—to the effect that Saddam Hussein could have been a very major threat to the world in the future had he been allowed to continue down the road to developing the nukes.

Mr. KASICH. Well, General, it was a great victory but my concern is that I am not sure we learned all the lessons from the war.

We know that the West German parliament just turned down a request by the prime minister, the chancellor, to prevent the exporting of chemical weapon technology and the SPD, interestingly enough, of all the parties, were the ones that rejected it. So the effort by the Germans to tighten up the spread of chemical weapons has been defeated. The Chinese are selling ballistic missiles to Pakistan and nuclear equipment reportedly to Algeria. Kim El Song is developing a nuclear weapon. The United States wants to use the Import-Export Bank to finance the sale of arms. It has just been reported that the United States has now resumed sale of military equipment to Lebanon of all places. What have we learned in terms of working to prevent the next conflict?

Now, I was a strong supporter of the President in this, believing that this "new world order" could function effectively to prevent war in the future. But when I take a look at what the world has done since the war ended, it has been like business as usual. I do not know—would you agree with that, that we have not seized on the lessons of the war? When you are making your speeches to—I guess the Lions Club could not afford you, but whoever it is that can afford you—I hope that you are talking about not just the great victory but what are the lessons for the next time?

Remember when you did that great job over at the Pentagon, you used to say we are doing this because we are trying to send the message that this behavior will not be tolerated.

General KELLY. I believe strongly that the world needs to do something to restrain the spread of dangerous technology to countries that are not trustworthy. I say that in every talk I give, by the way. Incidentally, I—

Mr. KASICH. But we are not doing anything. There is some talk about restrictions on chemical weapons, but Jim Baker was proposing, for example, we stop any arms sales into the Middle East. He

was rejected. There was just an article in a magazine—I know we have to go, Mr. Chairman.

General KELLY. I have to catch an airplane.

The CHAIRMAN. Sorry, General Kelly.

Go ahead, do you have a quick comment to finish up?

General KELLY. I was just going to point out that there has been much made of how much money I am making on the lecture circuit. I would point out that for the last 14 years of my service I was working for half pay or less.

The CHAIRMAN. General Kelly, we promised you that you would be out of here by 11, it is already 5 minutes past.

Thank you very much, General, for being with us this morning. It was very helpful and we enjoyed the conversation very much.

Thank you.

General KELLY. An honor to be here, sir.

[Whereupon, at 11:05 the hearing was concluded.]

WHETHER OPERATION DESERT STORM WAS SO UNIQUE AN EVENT THAT DANGERS COULD BE FACED IN DRAW- ING NARROW LESSONS FROM THE CONFLICT

HOUSE OF REPRESENTATIVES, COMMITTEE ON ARMED SERVICES, INVESTIGATIONS AND READINESS SUBCOMMITTEES, AND DEFENSE POLICY PANEL, *Washington, DC, Friday, April 26, 1991.*

The subcommittees and panel met, pursuant to notice, at 9:30 a.m., in room 2118, Rayburn House Office Building, Hon. Les Aspin (chairman of the committee) presiding.

STATEMENT OF HON. LES ASPIN, A REPRESENTATIVE FROM WISCONSIN, CHAIRMAN, HOUSE ARMED SERVICES COMMITTEE

The CHAIRMAN. The meeting will come to order.

This morning, today, we continue our series of hearings on the fundamental questions raised by the 100-hour war with Iraq and look at how the answers can help us devise a defense that works.

In this morning's hearing, we will concentrate on the uniqueness of Operation Desert Storm. Everyone has been engaging in the popular support of drawing lessons learned from the war. We hear that the war taught us that we planned this right and that wrong. This morning's hearing is an effort to take one step back from the normal lessons learned exercise.

This morning we want to ask whether Desert Storm was so unique, was so unique an event that we face dangers in drawing narrow lessons from this conflict. For example, air power was very successful in this war. To many that means the Air Force has finally achieved a goal, the ability to so devastate an enemy from the air that the Army is only needed to mop up the battlefield.

Is that likely, or was the desert environment, with its clear skies, flat land mass and absence of cover a rare environment in which to fight? Could we move our air power to Vietnam and win a war there now in 40 days given the triple canopy jungle that predominates?

The purpose of this hearing is not to do battle over finite lessons learned, but rather to look philosophically at the issue of how we should go about learning lessons in war or from any one conflict.

What are the pitfalls of which we should be wary as we engage in defining the lessons of the 100-hour war? Where do we draw the line?

To help us in this endeavor, I have asked some senior retired officers to share their professional judgments with us, men who have no special connection with Desert Storm, but more than a century of collective experience in uniform.

I am very pleased to introduce to the committee a very, very distinguished panel. Gen. William C. Westmoreland, Chief of Staff of the Army from 1968 to 1972; Adm. Elmo Zumwalt, the Chief of Naval Operations from 1970 to 1974, and Gen. John Vogt of the Air Force, who was Commander of the U.S. Forces in Europe from 1974 to 1975.

Gentlemen, thank you very much for being with us, and what we would like to do is to hear any opening statements that you would care to make, and anything that you would want to put into the record, please put in the record. Then we would like to follow it up with some questions.

General Westmoreland, why don't we begin with you and then Bud Zumwalt, and then General Vogt.

**STATEMENT OF GEN. WILLIAM C. WESTMORELAND, USA (RET.),
FORMER CHIEF OF STAFF OF THE ARMY**

General WESTMORELAND. I do have a prepared statement.

The CHAIRMAN. Without objection, it will be put into the record. Thank you.

General WESTMORELAND. Would you like me to read it?

The CHAIRMAN. Yes, please.

General WESTMORELAND. Yes, I am pleased to appear before this important panel of the House Armed Services Committee.

The CHAIRMAN. Could you make sure you just pull the mike very close to you? The trouble with this mike system is you have to talk directly into it.

Thank you. That's good.

General WESTMORELAND. The fact that you have called before you U.S. military has-beens—and that describes us, doesn't it?—demonstrates your open mind and a desire for a variety of experiences and views.

Our recent short but highly successful campaign in the Persian Gulf region validates the effectiveness of the total force concept, but we must realize that it was a campaign, not a war in the conventional sense, one that will probably never be duplicated.

But we can conclude that our leadership on the battlefield and here in Washington, the weapons that were made available by this committee of the Congress to the Armed Services, particularly means for battlefield mobility, especially the helicopter, sophisticated communications, means of navigation, and tactics were all put under stress during the course of that campaign and met the test.

The combined effort was exceptional in its success. On the other hand, the terrain, the open skies, the poorly trained and led enemy Army played into our hands. Perhaps never again will we face a military leader as inept as Saddam Hussein, as aptly described by General Schwarzkopf.

Perhaps never again will we have a massive, modern logistical infrastructure in place and available for our use, all built by oil revenues from the Middle East. Probably never again will we confront an enemy nation surrounded by nations friendly to us and ready, willing and able to impose an embargo and conditions needed to wage war, and in most cases provided combat troops.

Never before have we been blessed with a United Nations Security Council fully in our support.

It does seem that our appraisal of the enemy was not as realistic as it should have been. Indeed, it is far better to overestimate an enemy than to underestimate him. But it does seem that intelligence estimates were overdrawn, as suggested by the requirement for 60 days of ammunition and essential supplies.

Our campaign in the Gulf was one of a kind. We should not get cocky about our success. We must expect that in the future, as in the past, conflicts will not go our way initially, in every respect. As we look to the future, we must maintain a versatile capability and prepared to build seaports and airfields, which we did not have to do with the war in the gulf. We must be prepared to seize and move over beaches, to bridge swamps and waterways, and to fight anywhere against well-armed conventional or irregular forces.

We must stay on the leading edge of technology and keep our troops equipped with modern materiel. The quality of our troops must be maintained.

Did you realize that the average age of men who fought in the Gulf was 27 years of age? The average age of those young men who fought in Vietnam was less than 19. That was a result of the volunteer Army, the voluntary force that we now have.

Finally, it has been with satisfaction on my part, as I am sure would be the case with my successor as Chief of Staff, the late General Abrams, that the battle in the Gulf was a valid test of the volunteer Army, and it passed that test.

In that context, I wish to submit for the record a copy of a public speech that I made on October 13, 1970, wherein I committed the United States Army to the achievement of a modern voluntary force. I would like to leave a copy of the genesis of that Army.

The CHAIRMAN. Without objection, the speech will be put into the record at this point.

[The following information was received for the record:]

4/26

ADDRESS BY
GENERAL W. C. WESTMORELAND
CHIEF OF STAFF, UNITED STATES ARMY
ANNUAL LUNCHEON
ASSOCIATION OF THE UNITED STATES ARMY
SHERATON-PARK HOTEL, WASHINGTON, D. C.
TUESDAY, OCTOBER 13, 1970 -- 12:30 P. M. (EDT)

I take special pride in addressing the members and friends of this Association today. I welcome the opportunity to be among those who acknowledge the vital role of the Armed Forces in our society . . . who are concerned about the spirit and strength of this Nation's military power . . . and who demonstrate their active support for the United States Army.

Today, I want to discuss what I believe is crucial to the security of our Nation and vital to the future of the Army. This issue is the volunteer Army.

I am announcing today that the Army is committed to an all-out effort in working toward a zero draft -- a volunteer force. In accepting this challenge, we in the Army will bend every effort to achieve our goal. But we need support and understanding from the Administration, the Congress, and our citizenry. This Association can help.

As you know, the Army is in a period of sweeping transition. We are redeploying forces from Vietnam, inactivating units, and reducing the size of our support base in the United States in order to come within reduced budgets. And we are still fighting a war. We currently have 300,000 Army troops in Vietnam. By next summer, after the withdrawal of those troops announced by the President, about 200,000 soldiers will remain. This is a large force executing an important and difficult mission. These forces must be supported for as long as the President chooses to keep them in action.

At the same time, this country is reordering its priorities and reallocating its resources. Department of Defense expenditures have declined sharply. The military share of the federal budget is smaller now than it has been at any time since 1950 -- just before the Korean War.

The percentage of our Gross National Product devoted to defense in the next few years will be smaller than at any time in the past two decades, even though we are still at war. In this fiscal year alone, the strength of the Army is being very substantially reduced.

During the remainder of this fiscal year, we must send to Vietnam each month over 20,000 replacements even to meet our decreasing requirements. About 40 percent of these men must be trained in the basic combat arms of infantry, artillery, and armor. Unfortunately, few of our volunteers elect the infantry in Vietnam as their choice. When we give a volunteer his choice, he is more likely to select some other job. Accordingly, for the near future we will continue to depend on the draft for most of our replacements.

If this Nation supports the chosen course of the President in ending the Vietnam War, I believe the draft must be extended beyond its expiration date of June 30, 1971. Additionally, we must appreciate that movement toward a volunteer force will take time . . . and continuation of selective service will guarantee a transition period without jeopardizing this Nation's defenses. And finally, and most important, even though we reach a zero draft, selective service legislation should remain in force as national insurance.

I am well aware of arguments both for and against selective service. Furthermore, I recognize that the Administration has committed itself to reducing the draft to zero. But I am also aware of the problems that confront the Army as we move toward a zero draft.

To achieve our goal, we must double or triple our enlistments and reenlistments. I assure you that we will muster our best efforts to achieve that goal.

The Army's strength is a function of the combined capabilities of both its Active and Reserve Components -- the One Army concept. Therefore, as our Active forces decrease in size, the Reserve Components take on increased importance. Both are vital to this Nation's military capability . . . and both will be affected as we move toward a zero draft. A significant part of this country's military potential and one frequently ignored is the Individual Ready Reserve -- a manpower pool of almost one million trained Reservists who could be used in national emergency to fill Reserve as well as Active units. This necessary adjunct of the Army Reserve is sustained by current selective service legislation.

We know that many in our Reserve Components are motivated to enlist as an alternative to being inducted. In view of this, a large part of our problem is to increase the number of volunteers in the Army Reserve and National Guard at the same time we increase volunteers in the Active Army.

How we manage the transition from an Army of over a million and a half men to one very substantially smaller is crucial in our movement toward attracting more men.

- + If we decrease our Active forces in such a way that we are required to force out of the Army a significant number of volunteer officers and men who have already established their professional commitment and ability -- some with two or more years of active combat -- we will hardly be in a good position to attract new men into our ranks.
- + Conversely, if we confront our young sergeants and junior officers with no chance for promotion for many years, we face the prospect of losing many of our most capable young leaders. At the same time, we present a dismal picture of career attractiveness for those we wish to recruit. If we are to attract and, more importantly, retain young talent, reasonable opportunities for advancement must exist.

We cannot have the Army that our Nation needs without good people. We need quality as well as quantity -- and in the appropriate skills to meet our needs. This is our primary task -- we accept it as a matter of the highest priority and utmost importance.

Success can only be achieved by a concerted effort in four areas simultaneously:

- + First, those of us in uniform in positions of high responsibility in the Army must attack this problem with all the vigor, imagination, and dedication we can muster, and we must apply ourselves intensively to the task.

+ Second, we must eliminate unnecessary irritants and unattractive features of Army life where they exist. But we will hold to those immutable principles of dedicated professionalism, loyalty, integrity of character and sacrifice. They are the hallmarks of a disciplined, responsible Army. All else is secondary. Young Americans thrive on challenges and high standards. We must insure that all activities have a perceivable need . . . understandably, exercises without a justifiable purpose "turn them off."

+ Third, we will not achieve our goal without the application of resources, and I mean money. We will need to increase pay. And we will probably find that we must put our money primarily in those jobs which are most arduous and have the least application to civilian pursuits . . . the infantry, artillery, and armor.

We will need money for housing our people -- an item for which we have deferred expenditures throughout the Vietnam War. We will need money to maintain those houses. We will need modern barracks. We will need money for civilian labor contracts so that our helicopter mechanics are not cutting grass and our radar technicians are not washing dishes.

+ Fourth, we will need the support of the American people and their leaders in business, industry, the church, education, and the news media. We cannot attract the kind of soldier we need into an organization denigrated by some, directly attacked by others, and halfheartedly supported by many. This country cannot have it both ways. If the Army is portrayed and believed as a Service to be avoided at all costs, a Service in which only those with the least qualifications need be recruited, and if we do not have the active help of community and national leaders in every field, even money will not do the job.

Success is required in these four areas if we are to achieve our goal. But the Army has sufficient control to produce what is required only in the first two. We can attack the problem immediately and energetically. And we can work toward making life in the Army more attractive for those young men we want to volunteer. But in the other two areas, we need help . . . from the Administration, the Congress, and the citizenry of our Nation.

I hereby commit the Army to the achievement of the first two objectives.

We have instructed commanders to avoid any practice that could be considered in the category of "make work." Specifically, they have been alerted to such things as:

- + Reducing inspections so that more time can be devoted to training.
- + Increasing their sensitivity to unrealistic training schedules that do not produce tangible results for the time expended.
- + And insuring that Saturday morning activity is not scheduled when that same activity could be accomplished just as effectively during the week.

We have achieved tangible results:

- + We have identified successful recruiters and stabilized their tours.
- + We have improved our training by implementing individually oriented, self-paced instruction in some military skills.
- + We have implemented a generous student loan program for dependents.
- + And we have begun to improve services for our men and their families -- items such as improved laundry and commissary services.

A final point, and one in which I have great personal interest, is the broad opportunities for the men and women in the Army to improve themselves. Education means a great deal to the soldier, the Army, and the Nation. What the Army is doing to provide additional educational opportunities for its people is not well-known. But it is substantial. Listen to this:

- + In the Army school system of 2 colleges, 20 branch schools, and 11 specialist schools, we offer over 900 different courses of instruction on a campus that is located in 17 different states. By the end of this fiscal year, we will have had 67,000 in the classroom each day of the year and will have enrolled over 350,000 servicemen in our Army school system. These courses cover a wide spectrum of academic subjects as well as skills, trades and crafts. And most of these are transferable to civilian pursuits.
- + During FY 70, 55,000 soldiers completed high school or received equivalency certificates and over 500 received baccalaureate or advanced degrees through the Army's General Education Development Program.
- + These were part of the 200,000 soldiers who took advantage of Army sponsored educational opportunities -- from the elementary through the university level -- during the past fiscal year.
- + Additionally, in this period, over 38,000 men who did not possess the necessary mental prerequisites entered the Army and have been given the opportunity to improve their basic level of education to meet our minimum standards.
- + This wide participation in educational betterment is in addition to the more than 2,000 officers who are currently enrolled in the Army's advanced civil school and degree completion programs.

As we look to the future we must, and will, do more to improve opportunities for the men and women in the Army to upgrade their education and to become better citizens.

These -- and other measures already adopted -- are only a beginning. We will do more . . . we will concentrate our efforts . . . and we will put maximum impetus behind them.

Accordingly, I am appointing a senior general officer as Project Manager, reporting directly to me and to Secretary Resor. His mission is to raise to the maximum extent possible the number of enlistments and reenlistments in both the Active Army and Reserve Components. This officer will have authority similar to that of the Project Managers of major weapon systems currently in the Office of the Chief of Staff.

Second, we are immediately increasing the size and quality of our recruiting effort.

And third, at all levels throughout the Army, senior officers will be charged personally with the responsibility for increasing the retention of good people, both by improving the living standards of their men and families and by an intensive effort to capitalize on the many attractive features of Army service.

Our Army is an organization of young people. Today the average age of those in the Army is less than 23 years. Over three-fourths of our enlisted strength has less than three years of service. The young men who are and will become our soldiers and junior officers have attitudes that differ from those of our older group of officers and non-commissioned officers. To ignore the social mores of this younger group is to blind ourselves to reality. Their values and attitudes need not necessarily be endorsed by Army leadership . . . yet we must recognize that they do exist. We must make Service life better understood by those who fill our ranks.

We will leave no stone unturned. We are willing to part from past practices where such practices no longer serve a productive and useful end. We are reviewing all our policies and administrative procedures. Nothing is considered sacrosanct except where military order and discipline . . . the soul of the Army that insures success on the battlefield . . . are jeopardized. In this, we cannot and will not yield. We will continue to hold to the principles that have traditionally guaranteed this Nation a loyal Army.

Those of you who have worn the uniform of our country look back on your service with satisfaction and pride. After the dust has settled, I am sure such will be the case with our younger generation. The important thing is that the Army not only provides an opportunity for the young people of our country to serve proudly but also provides them an opportunity to prepare themselves to be better and more effective citizens.

Today, the Army of the United States has committed itself to moving toward a volunteer force with imagination and full energy. But our success will require the assistance and support of the Administration, the Congress, and the public.

Our efforts, alone, will not be enough. All citizens must do their part. We will need assistance from many quarters. We invite your help.

General WESTMORELAND. I am pleased to appear before you. I welcome the opportunity to make known to you my views on our latest confrontation with an enemy.

Thank you.

The CHAIRMAN. I want to thank you very much.

The CHAIRMAN. Admiral Zumwalt.

STATEMENT OF ADM. ELMO ZUMWALT (RET.), FORMER CHIEF OF NAVAL OPERATIONS

Admiral ZUMWALT. It is a pleasure to be back with you again, Mr. Chairman and Members of the committee. I congratulate you on your foresight in the series of hearings you are having in this regard.

The first point I would like to make is that we need to be aware that this war was run by the first professional Commander in Chief that we have had since General Eisenhower. We have had many accomplished political Presidents, but I think this is the first professional Commander in Chief since Ike. The comparison between his performance and the performance of our Commanders in Chief for those of us who served in Vietnam is dramatic indeed.

When one recalls the minutia in which Commanders in Chief got involved in the Vietnamese war and the extent to which they controlled strategy, it reminds us very clearly that there were thousands and thousands of casualties that need not have been lost. We can't assume we will have a similar Commander in Chief in another crisis, but certainly the precedent that President Bush has established of setting the general guidelines and then letting the military run the war is one that will be hard for any future President to disregard.

The second point I would make is that I think we can't assume that there will be similar availability of forces in any future crisis.

To put it another way, if Saddam Hussein had been wise enough to have waited another 3 or 4 years, when he had nuclear weapons available to him and when by the will of popular desire in this country, the cuts in the defense establishment continued, as I am sure they would have, we would have been in deep trouble with respect to trying to do a similar thing.

It would be very difficult for us, even under present plans, to operate again the way we did in this last crisis. There are going to be significant additional reductions in force.

I think there is a 50 percent probability there will be a reconstituted Soviet threat. I made three visits to the Soviet Union in the last 2 or 3 years. I have met with hundreds and hundreds of people, both officially and unofficially, and the economic chaos is remarkable.

I believe that Gorbachev's days are limited. He already, I think, has been co-opted by the hard liners. I think they like to have him be the front man. They may become discontented with the rate at which he is moving. Or, alternatively, the popular dissent as the economy continues to worsen will lead him to be ousted by a movement from the left led by Yeltsin.

Of all the hundreds and hundreds of people, I couldn't find anyone under 40 for Gorbachev. They were impatient to get Yeltsin

in power. Those over 40 who remember the terror are still somewhat grateful to him.

The Soviet Union has cheated on arms control agreements. They have defined illegally the use of naval infantry. They have a lot of equipment which was supposed to have been destroyed.

In addition, I don't think we can completely rule out the prospect of a return to dictatorships in some of the Eastern European countries. At the present time, under "philosopher kings" such as President Havel and President Walesa in Poland, the situation seems reasonable. There is clearly an overwhelming support for a return to market economies.

But there is also a great deal of concern among the people about the lack of discipline. They have been used to discipline all their lives. As their economies worsen, if we don't give optimal help to them, I think one can expect to see the prospect of some return to hard-line dictatorships there, more nearly along Fascist lines. I would put only a 10 percent probability on that, but nevertheless it is something we have to keep in mind.

So there is certainly a prospect that in another major Third World crisis, we would have to be concerned that we would have one hand tied behind our back, that we couldn't use all of our force levels to the extent we did in this war, and we would have to withhold the full use of our high-tech munitions, saving some for possible other threats.

Desert Storm was unique—my third point—for a whole host of reasons. It was able to be successful for a whole host of reasons. Two-port facilities, magnificently prepared for us. A range of air fields, with POL, aviation gasoline, hangars, space for spare parts, and so on. Great logistics. Water was available. Fuel, roads, hospitals.

The sand was a problem from the standpoint of maintenance. On the other hand, there was no place to hide. Weather for the 7 months we were there worked right for us. The enemy troops were away from populations, and despite the best efforts of the media to exploit civilian casualties, we didn't have to kill many civilians to go after those troops. The infrared detectors picked up those tanks at night because the tanks didn't cool as fast as the sand and so forth.

We had time to build up. We needed that time in order to be able to train. We had to take that kind of time because Saddam Hussein had seized the strategic initiative. Interestingly enough, we killed as many people in the training process, nearly, as we did in the war itself. That was very important training that had to be done to get us ready. It made us able, just like the Israelis have always been able, as they prepared for a single contingency, to be highly efficient.

We did control the timing tactically. We chose the times of initiation of hostilities by air and on the ground. We faced a very incompetent Iraqi Air Force. Our aircraft and Tomahawk cruise missiles knocked out the key command and weapons control systems quickly.

As an aside, we need to be aware of the fact that we have given away any right to have those kinds of cruise missiles on the

ground. You can only have them on sea-based platforms under the arms control agreements.

Saddam Hussein did not prepare his forces ideologically, the way the Vietcong did. The Vietcong fought to the last man on many occasions. The reverse was true here.

I think no place else in the world could we count on such a favorable combination in geography, terrain, population factors, and weather. At no other time did we have such a happy combination of political factors. The critical, obvious need to protect the oil.

No other enemy could ever be so stupid: to disregard public opinion, to dig in to eliminate mobility, and to have as a single strategy the hope he could kill enough Americans to make victory possible.

In the same situation, had he made the effort to seize Saudi Arabia, the oil fields, the air fields, the cities, which he clearly had the capacity to do in the early hours of his strike, we would have been denied U.S. infrastructure that we had there. We would have had a more conventional entry problem, with some amphibious landings required, undoubtedly difficult terrain to go over. It would have taken us a much longer period of time. We would not have had on-scene training for the ground war because we would have been fighting our way in. A much bigger percentage of the war effort would have been carried by sea-borne forces. We would have had no land bases initially.

If you really want to think about the mother of all tragedies, had Saddam done the same thing in the Saudi oil fields that he did with the Kuwaiti oil fields, the world would have been in great, great travail at the present time.

Let me just cite a few things I don't think got into the public consciousness. I don't think the public was aware it was the fact that our total control of the sea lines of communication, was never in question, that made it possible for that rapid logistical buildup to take place without any attrition whatsoever.

I don't think the situation of the Naval air arms contribution came through. It was about 30 percent of the total number of strikes. Because procedurally it was a Unified Command system, to the public it sounded like an Air Force war.

I don't think the situation of the amphibious presence was made clear, the extent to which it tied up Iraqi divisions.

There was a very serious mining threat and we were indeed very lucky we got off as cheaply as we did. They were permitted to lay over a thousand mines. You recall the tremendous difficulty we had in reopening the Suez Canal back in my day when we had to do the mine sweeping. In the future we will have to treat the beginning of mining in a situation like this as an act of war and not give the enemy the freedom to lay those 1000 or more mines. We were just very fortunate that we and our allies were able to contain that threat.

There was a magnificent medical buildup by all the services. The hospital ships of the Navy, the land-based hospitals of the other services and the way in which the regulars were deployed forward and the Reserves were brought from back here in the States was of very dramatic importance.

With respect to the sealift and airlift question, I think to a certain extent there the issue is in the eye of the beholder. If I were a

ground force commander, I would want to be able to carry 500,000 troops out there in a single wave. Even so, it would have taken 5 or 6 weeks to get that single wave there. But also necessary was the need to mobilize, the need to handle outgoing at the ports here and to handle incoming at the ports there, and the great need for training time.

The phased buildup was made more efficient by virtue of our prepositioned forces, our forward deployments, and as General Westmoreland has said, the Saudi Arabian infrastructure.

I think we need more air and sealift, but we can't afford it.

There were some shortcomings that were quite clear. Some of the ships in the Reserve fleet were not adequately maintained and were not ready. We don't have enough mariners in the United States of America to support this kind of activity. We had to hire foreign ships.

In the future, if the Merchant Marine continues to decline, we are going to be faced with the prospect of subsidizing or seizing ships if we can't hire them.

Let me just talk about some of the other threats that we might have faced at the same time, and threats that I think would present a different set of challenges than the one we have just conquered in Iraq.

First, North Korea with its very near acquisition of nuclear weapons and its present acquisition of ballistic missiles: The regime is now surviving, with the most vicious of ideologies. Strategically, if Kim Il-song should strike, we have somewhat of a different situation in my judgment because the land bases there would be rather rapidly overrun as they were in the Korean War. Japan would be available, but we have much more of a maritime requirement there in Korea.

Cuba: We would be quite able to meet the marine challenge if we had to go into Cuba. We would obviously also need the air from the United States and the ground forces to go in and do the job.

Libya, a completely different challenge: You could land some forces in Egypt and move them along the coastal plain, but here again the majority of the power would come from sea by air and surface.

Syria, allegedly our ally in this war with 800,000 troops, 4,000 tanks, 800 aircraft, ballistic missiles, and a ruthless dictator. He has slaughtered his own people, just as Saddam has never hesitated to do. We need very desperately to keep our two democratic allies on either side of Syria in the game, Turkey and Israel. Of course our Navy and Marine Corps presence there is going to be mandatory.

Just a quick word about Goldwater-Nichols. I think the concept of having the chairman be primary has paid off. I think a very high payoff was having a No. 2 vice chairman who had the corporate continuity. Back in General Westmoreland's day and mine, when the chief was absent, the senior chief of staff took over and it was always a crisis to get up to speed and be able to deal with the issues.

I talked to two chiefs who were in this involvement, and they felt they were kept informed and were heard and had the opportunity

to give input, and yet the system worked well. It may have been that the personalities were such that it worked well.

My recommendation would be that we judge the overall result to have been favorable and that we don't tinker with the system for another 8 or 10 years as we have so often in the past.

My conclusions are:

That we should always be sure to elect a competent Commander in Chief.

That we should always be sure that we have the kind of congressional support that we had in this war.

That we need to work hard to maintain United Nations support in a crisis. That we should let the military run a war within the guidelines set down.

That we need to be aware of the importance of keeping sea control. The OEEC nations are cutting their navies down to pilot size. In another crisis, or even in this crisis, had Saddam gone into Saudi Arabia, time would have been much more of the essence and the presence of those seaborne forces would have been even more vital.

I think we need to keep our forces versatile. For my entire lifetime, the Cold War has required us to optimize against the Soviet Union but to sub-optimize against Third World threats.

In the future, I think we need to optimize against Third World threats but to maintain a sub-optimization against threats from the Soviet Union. We have to have high-tech capability to deal with both of those kinds of challenges. But we can't afford that everything be high tech. We are going to have to have a sensible combination of high and low tech.

I think it is time for the Navy to begin to build some diesel submarines, a few, to be able to do some of the R&D testing, some of the shallow water work and some of the reconnaissance work for which you don't need the much more capable nuclear-propelled submarine.

With respect to sealift, we need to have some subsidies to maintain a Merchant Marine. With respect to airlift, we can't afford much more, but I would like to see more. Our industrial base continues to dwindle.

We need continuing diplomatic support to deal with crises. We need to make the United Nations work better. We need to keep the Soviet Union with us. Without them, we can't make the U.N. work.

China is being very contrary to our interests at the present time with the proliferation they are facilitating. We need to work very hard to stop the proliferation of weapons of mass destruction. We need a vigorous checking system, not only on the monster Saddam, but on people like him for whom we won't have the resolutions that we were able to get through the United Nations in Saddam's case.

We need to expand the NATO into being much readier to deal with threats to NATO from regions outside the traditional NATO area.

We need to have the military emphasize research and development, emphasize intelligence as our forces continue to dwindle, and

I think we need target subsets ready to go with respect to all the contingency areas I have run through.

We are in a very unique period right now with a hiatus around the world resulting from a great deal of respect for what the United Nations, primarily the United States forces can accomplish and have accomplished. People like Assad of Syria, Kim Il-Song in North Korea, Castro in Cuba, and Qadhafi in Libya are going to behave for a while. We should take advantage of the hiatus. We have got to fix what is broken.

Thank you.

The CHAIRMAN. Thank you for your interesting testimony.

The CHAIRMAN. Now, General Vogt.

**STATEMENT OF GEN. JOHN W. VOGT, USAF (RET.), FORMER
COMMANDER IN CHIEF, U.S. AIR FORCES IN EUROPE**

General VOGT. Mr. Chairman, Members of the committee, I have no prepared statement but I would like to make some observations. I would like to draw some contrasts involving the war in Vietnam as it relates to the war in the Middle East.

Actually, in Vietnam or in Southeast Asia, we had several wars. We had a war in the north, where we bombed in the north. Under the command and control of an Admiral who was several thousand miles away in Honolulu, we had a war in a country under command of an Army General whose authority was restricted or limited to all in-country operations. We had another war in Laos where the U.S. ambassador usually put on his marshal's hat and tried to dictate the strategy and method of operation. We had another war in Cambodia where the same situation applied.

As an air commander, I found when I arrived on the scene that I was taking orders from five or six different bosses, all asking for increasing shares of the limited air at my disposal.

So my first pitch is that we must in future wars do what we did in this most recent war, unify the command and control, give the authority to one man, and have all tasks accomplished by a single tasking order.

I want to support Admiral Zumwalt's comments with respect to the role of the Commander in Chief in this operation. I recall the days when I was in the Pentagon working for the Secretary of Defense, and we were conducting so-called Rolling Thunder operations, the bombing operations against North Vietnam, the procedure for picking of the targets.

The targets were picked by no less a person than the President of the United States on a weekly basis, with advice from the Secretary of Defense and the Secretary of State. The military commander's recommendations were watered down or drastically changed, and we found many situations where the targets could not be hit because the weather in the area where they had been selected wouldn't permit operations in that area, and we would sit for a week with no air activity at all.

This management from the top led to a tremendous hampering of the military operation in Southeast Asia. This President chose to do it differently. This President chose to do it the right way. He gave his overall guidance, he imposed few restrictions, he demand-

ed a sound military plan, which he then reviewed and authorized the execution of, and then he entrusted the running of the war to his generals and admirals. I think the results speak for themselves.

I would say the most significant single factor, difference in the war in Vietnam from the war in the Middle East, was the sound exercise of authority and command from Washington, primarily from the Commander in Chief, the President of the United States. This was a dramatic difference, dramatic difference. I hope in the future that lesson will be learned by future Presidents.

I said we had different wars in that part of the world, and each war required—in Southeast Asia, and each of those wars required different types of forces and different capabilities. When we were fighting in North Vietnam, we were fighting modern weapon systems, modern air defense systems, MiG fighters, well-disciplined forces, forces aided and abetted by the Soviets who stole the air defense systems and manned the defense industries and even had pilots in the air aiding and assisting the North Vietnamese pilots in the interception of my airplanes.

In short, it was a very sophisticated type of defense that we encountered, with SAM systems in great numbers, and great technical proficiency. In South Vietnam, we faced none of those modern threats but we faced other obstacles. The jungle cover, the fact that the enemy could elude us by hiding under triple canopy, and the fact that the war had to go on for months without any decisive encounters, certainly during the guerrilla phase of the war.

In Cambodia, we had no U.S. forces on the ground. We had the difficult task of trying to provide air support to people who didn't speak our language. We had to put bombs within a few hundred meters of friendly forces without knowing whether or not they were understanding our instructions, running the risk each day of bombs falling short or long as a result.

In Laos, we had a similar situation. There we encountered difficulties peculiar to the terrain. We had a slash-and-burn season, for example, which made air operations exceedingly difficult because of visibility problems as they burned off the fields and the visibility went virtually to zero.

We had a different war in 1972, after the Easter offensive, where for the first time the enemy came out in the open, en masse, and invaded with some 13 divisions. Conventional force operations, unlike the guerrilla-like activities that proceeded prior to the time of Tet. For the first time, as they rolled into South Vietnam, we were given an opportunity as airmen to go to work on them.

Air is most effective when the enemy is fighting on the ground in conventional war, because then he has to come out in the open, he has to sustain his forces forward with ammo and POL. It becomes critical then in terms of supply and resupply operations.

We can interdict, and indeed in 1972, when 500,000 U.S. troops had left the country or were largely out of the war, American air power in support of the South Vietnamese forces alone defeated the North Vietnamese and Vietcong in every major engagement in that war, whether it was for Quang Trie or An Loc or the war up in the Tourakom area.

By October of 1972, this combination of decisive U.S. air fighting effectively with South Vietnam's forces had pushed the enemy out

of all the territory it had occupied in its initial thrust in the Easter offensive of 1972.

In fact, in my military opinion, at that point in the war, if the decision had been made, we could have gone all the way to Hanoi, whose forces had been decimated. He had one remaining division between the demarcation line and the city of Hanoi at the end of that campaign.

Now, the war unfortunately ended on a sour note. We agreed to a cease-fire. Then didn't enforce it. In our failure to enforce the cease-fire, the whole thing went down the drain some 10 years later.

There is a political lesson to be gained there. The war, particularly the air war in the Middle East, capitalized on many of the air lessons we had learned in North Vietnam. We had introduced, for example, in 1972, the precision weapons that were so effective in the Middle East. The laser weapon was used there by my forces with very great effectiveness. We were achieving 15-foot CEPs, on targets throughout the area of the North, and were able to destroy with three or four airplanes bridges that previously had stood the attacks of many, many wings.

We were able to knock out power plants with four or five airplanes in a single mission. In fact by October of 1972, using these precision weapons, we had interdicted two rail lines in China, destroyed virtually all the power plants in the country and had successfully interdicted all his resupply operations from China.

There were some deficiencies in our capabilities. One was a lack of an airplane like the AWACS. As a consequence, when we were fighting in the north with our air, we were fighting blind. Our airplanes flew beyond the range of our own ground radar stations. We had no airborne radar that could survive that environment. They were all old propeller-driven airplanes. We couldn't use them. So we were winging it with just the pilot's eyeballs to tell him where the enemy was.

In the war in the Middle East, the AWACS successfully identified every single sortie by every single Iraqi airplane from the moment it taxied out on the runway and took off to the moment it got within the vicinity of our airplanes. This certain knowledge of where the enemy was at all times led to the very successful air engagements that we were involved in, and led to the very lopsided victory-to-loss ratio.

The conventional war we fought in 1972 proved what air power can do when the enemy is fighting and must come out in the open and must come down the roads in his tanks and expose himself to air power. This was a situation that existed in the war in Iraq. The enemy, if he had to fight effectively on the ground, had to expose himself, and if he did, he was met with certain destruction.

The enemy chose to stay dug in in the sand in the desert with its tanks until we pressed them, particularly with respect to the Republican Guard armies. Then when he did come out and fight, the U.S. air chewed him up.

It is significant that the 38-day air war made the ground war of 4 days a possibility. The enemy was so decimated by the air activity of the 38 previous days that he had neither the capability nor the will to fight. That in large measure, in my judgment, explains why

our casualties are low and why the enemy gave up in tremendous numbers and why he was routed in a very short period of time.

In conclusion, let me say just two things. First, command and control starting at the very top with the Commander in Chief is essential. The support of the Congress and the American public is absolutely essential. We did not have it in Vietnam. We had it in the Middle East war. It made all the difference in the world, the morale of the troops and the willingness of the airman and the soldier to stick his neck out. If you think you are out there fighting an unpopular cause, it is very difficult to fight.

Second, we had a weather situation, while not very good in actuality, when the air campaign got under way in the Middle East, was far better than the kind of weather we enjoyed in Vietnam, particularly during the northeast monsoon periods, when we had zero weather capabilities. For example, during the entire 11-day Linebacker II operation, there were less than 8 hours in that entire 11 days when we were able to use laser-guided precision weapons.

Now, I submit, gentlemen, that if that kind of weather had existed in the war in Iraq, the dramatic results that you saw would not have been achieved. In other words, even our most successful weapons systems have severe limitations and could not have done what we did, particularly in the attack on the capital of Iraq, with those precision weapons, if the weather had been Vietnamese north monsoon weather conditions where the bottoms of the ceilings were 900 feet and the tops were 20,000.

The weather in Iraq was layered, scattered clouds for the most part, permitting the pilots to spot the targets and designate with their designators and destroy them with precision with their laser weapons. But lasers and IR weapons and many of our sensor systems simply don't work when the weather is bad. They are diffused by heavy clouds and moisture in the air.

We have got to remember this. For those who think we can drastically reduce force structure and by just a handful of precision weapons, let him be warned that if the war occurs next in the rainy season in the heart of central Africa, we will not achieve those kinds of results.

I would make a plea, therefore, for greater flexibility in the weapon systems we buy, weapon systems that can operate under all conditions of weather and under varying circumstances.

I agree with Admiral Zumwalt, the bases could be problems in other areas. So I would ask for the longest legs we could achieve in our future airplanes, and of course the most air refueling capabilities.

Most of all, I would urge that we do what we did in the desert war and agree to a major authority so that the air effort can be a concerted effort, and so that the main thrust goes down on the enemy.

I think we have made a good start. We have learned a lot of lessons from both of those wars. I hope you don't forget them. I hope you gentlemen who were in the forefront of making the decisions on future weapon systems will give the military those kinds of flexible forces that I have just called for who will permit us to meet the varying conditions in the many other types of wars that we can encounter in the future.

Thank you.

The CHAIRMAN. All the gentlemen on the panel, thank you very much. That was very helpful and very, very interesting.

I will ask the first question and then we will make good a couple of rounds.

I would like to ask each of you, General Vogt was essentially getting to it in his comments. I would like you to reflect on the differences between Vietnam and the situation here.

Clearly, there are some important differences that have occurred in the United States military forces in the years since Vietnam. One is that there has been an all-volunteer force, and as General Westmoreland said, that means an older, more experienced force capability. It also means a high-quality force right now, in terms of high school graduates.

A second thing and I think all of you have alluded to it in one way or another, is the Goldwater-Nichols Unified Command.

A third, which is something I think all of you referred to or most of you referred to was no political interference.

I guess a fourth is clearly some improvements in weapons. I mean, the weapons have just gotten more technical and more capable in the time since the war in Vietnam.

We also, of course, had some differences on either side. This was a desert and that was a jungle. The Iraqi forces were not the Vietcong in terms of dedication. I think Admiral Zumwalt pointed that out.

Let me ask you this. Suppose that we were to—I guess what I would like you to judge for me is, if we had had the U.S. forces of today, would that have made a difference in Vietnam?

In other words, as General Vogt said, the outcome in the end was, in 1975, that the end of the whole thing was disappointing for a number of reasons, political lack of will there at the end to enforce the provisions of the cease-fire. But if we had had a force then that was an all-volunteer force, if we had had Goldwater-Nichols, and the lack of political interference, for example, could we have won Vietnam?

We won in Iraq very decisively. Compared to Vietnam, Vietnam was a disappointing outcome. I guess what I am looking for is the difference—our forces are clearly better than they were then. Is that enough to have made the difference?

Let me ask Admiral Zumwalt and then General Westmoreland and then General Vogt.

Admiral ZUMWALT. I guess in my judgment we would have had a more efficient performance had there been an overall single command. I don't think that that increase in efficiency under the given strategy would have made much difference.

In my judgment, the forces that we had available were clearly adequate to have ended that war decisively and quickly had we been permitted to make amphibious landings to seize Haiphong and Hanoi. We could have ended that war with a tenth of the casualties we suffered, in a tenth of the time, less than a tenth of the time.

It was the erroneous, fallacious strategy, it was the fighting of a war with one hand tied behind our backs that made that long, drawn-out war unsuccessful. Indeed, in the early year or two of

that war, we had the support of Congress and the support of the public. We had everything we needed except Commanders in Chief that were willing to make the tough decisions.

General WESTMORELAND. There was tremendous concern by our Commander in Chief, the President at that time, that Vietnam would expand into a world war configuration. President Johnson was very sensitive to the fact that when we went to the Yalu River in the Korean War, although General MacArthur did not think the Chinese would come to the battlefield, they did. They came en mass. We took tremendous casualties and it took us approximately a year to restore the lines near the 38th parallel, where it was a stagnant war for approximately 2 years, until the truce at P'an-munjom.

We still don't have a peace treaty in Korea. We have 41,000 troops there on the ground. It is an unsettled situation.

Mr. Johnson was very trepidatious about bringing the Chinese to the battlefield in Vietnam. We can only speculate on what would have happened if we had moved forces into North Vietnam. But it seems very clear to me, and it seemed clear to me at the time, that Mr. Johnson felt that such development was a probable course of action, and thus he wanted to confine the war geographically. He did not want it to expand into other countries into a World War II-type of configuration.

Those matters were very much on the mind of Mr. Johnson at the time. For that reason, and I think that was the overwhelming reason that he felt that he personally had to get very much involved in the details of the war, which made us very unhappy in the military.

But when you see the situation in Southeast Asia today, Communism has been discredited, aided and abetted by the boat people. Communism has not moved into the ASEAN countries. It stopped in Indochina. We have no troops on the ground, but we still have 41,000 troops on the ground in Korea. The Communist regime in Vietnam, I think it is short-lived.

So in due respect to the then Commander in Chief, he had reasons he thought were considerably valid to refuse to heed the total voice of the military.

I departed Vietnam in late June of 1968.

Now, I was unhappy about this situation at the time. All of us in uniform were thinking in terms of defeating the enemy on the battlefield, which we did in South Vietnam. The American troops there did not lose a battle of importance. When the North Vietnamese took over, our troops had not been on the ground for 2 years. They had been withdrawn by political authority.

Now, public opinion doesn't understand this, but it is a fact. So although at the time, I felt as the sentiments expressed by my colleague, Admiral Zumwalt, as I see the situation now, I have a greater appreciation of the fear of President Johnson than I did at the time.

The CHAIRMAN. Thank you.

General Vogt.

General VOGT. Well, sir, you have heard my earlier view that actually in the—by the end of 1972, we had won the war in country, in Vietnam, it is quite clear in my mind. The historians will have

to sort this out, but by the end of December of 1972, we had a defeated enemy. He was on his knees, defeated in every major battle in country, without any U.S. ground forces there at all in a combat role.

We had excellent corps advisors within the South Vietnamese forces, who provided leadership to them, but the South Vietnam troops fought and fought well. The generals were good. With their assistance, they were able to drive the enemy back out of their country and back beyond the lines that they were in when they started in Easter of 1972.

I think, if the terms that we had agreed to of the cease-fire in December and January of 1972 and 1973 had been enforced, there would not have been a loss of South Vietnam. So I say, it was not a military loss; it was a political loss that occurred when, some 2 years later, we withdrew virtually all of our remaining support and let it go down the drain.

We had all the weapons systems we needed; we had good leadership, forces that fought well. But we simply were constrained in many of our activities.

Let me give you one example of the kinds of sensitivities that were registered in Washington that constrained our military operations—one example, and I could give you a dozen here this morning, but this is typical of the kinds of constraints that were imposed from the top.

By August of 1972, our Linebacker Campaign had destroyed all the power plants throughout all of North Vietnam. These people were now reduced to running on small generators and on one single power plant remaining in the heart of Hanoi itself. We could have taken that power plant out at any time with no difficulty, and yet Washington would never permit us to do it, out of a fear that somehow or other we would hit a foreign embassy or in some way endanger the civilian population and possibly escalate the opposition to the war, here in country, or the opposition here on the Hill.

Late in the fall of that year, my intelligence people told me that the Russians had built a new hydroelectric plant 90 miles northwest of Hanoi, that, when it came on line, would restore virtually all the power that we had destroyed in this long air campaign—the Navy destroying all the power in the Haiphong area and I had destroyed it elsewhere in the north. It was now going to be all made up by the pull of a switch with a giant, four-generator plant sitting on top of a vast earthen dam.

So I asked for the authority to hit this. I couldn't hit it on my own authority, because it was on a dam, and dams and dikes were no-noes. I remind you that in World War II they gave medals to British pilots who destroyed dams, but there, if I nicked a dam or a dike, I was immediately condemned for some barbaric act.

In any case, here is the power plant coming on line; it is sitting on top of a dam. These people are going to make up all the losses they have sustained when they pull the switch, and Washington says, no, you cannot hit it, because four small villages of less than 800 people apiece downstream might be flooded, and there might be civilian casualties.

Now, is that sound military strategy or tactics? Does that make military sense to tie your hands that way in trying to win a war?

Incidentally, there was a happy ending to that story. The Chairman of the Joint Chiefs, Admiral Tom Moore, said, if you can promise us that you could hit that power plant sitting on top of the dam without the dam and causing the flooding, you have the authority.

You can bet the pilots and I did a lot of soul-searching before we decided to go in, but we made the decision to do it, and indicative of the professional capability of our airmen, the pilots put 12 2,000-pound laser-guided bombs through the roof of a building 100-feet long and 50-feet wide, destroyed all the generating capacity, and never put a nick in the dam.

But here, you see, is a case where you are putting the burden on the troops in the field because you don't want to withstand the political heat of authorizing the strike, regardless of the results that might be inflicted. This kind of restriction, this kind of timid attitude on the part of Washington all during our campaign in Vietnam reflected the many inhibitions that resulted in indecisive outcomes on so many occasions in that war.

Now, contrast that with the Gulf War. In the first 20 minutes of the war, they were in the center of Baghdad; and you saw it on TV, putting their bombs down on the command and control structure and on prominent buildings, particularly the communications buildings, which looked just like normal, big office buildings in the heart of the city.

For months, I had a 20-mile restriction around Hanoi. I couldn't go within 20 miles of the center of the town for fear that we might hit one building that was other than purely military. Those are, I think, the dramatic differences between these two wars.

Once again, the credit must go to the President, who acted as a true Commander in Chief in this war and who made the tough decisions, took the possibility of disaster on his own shoulders, but in doing so, succeeded in getting an outcome we all needed and wanted.

Admiral ZUMWALT. If I might just make one quick point, in addition, about the differences. In the case of Iraq, there was total, worldwide support for cutting off all their logistics. They got some food across the borders and a few things through Jordan, but basically, that entire area was sealed off.

In the case of Vietnam, we cut off all of the logistics by sea directly into South Vietnam, but were not permitted, for years, to stop them in Haiphong. Ultimately, we got authority.

We were not permitted for years to cut the railroads; ultimately, we got authority to cut the railroads to China. We were not permitted to take in international water the ships bringing the logistics into Cambodia and being trucked across into South Vietnam.

You could do a calculation of how many more thousands of dead are on that Vietnam Memorial in terms of each one of those decisions to let the logistics come in that killed American soldiers, and yet nobody ever stopped to look at it in that context at the political level.

The CHAIRMAN. Thank you. These are some interesting comments.

Let me just raise the question, and General Vogt, all of you have touched on it, not to take anything away from George Bush's per-

formance—and General Vogt is absolutely, I think, right about that—but in a sense, again going back to what General Westmoreland said, isn't it an easier choice in time? I mean, we were worried, clearly, in the case of Vietnam, about bringing the Chinese and/or the Soviets into the war.

We didn't have to worry this time. The Soviets, first of all, are having their own internal problems and are much more preoccupied with their own internal problems; and to the extent that they were playing on this, they were supporting us.

Wouldn't the decision—I guess what I am asking is, the political interference in this war was almost nonexistent, and I think that has made a big difference here. But I think there is a reason why the political interference was nonexistent, and that is that the danger of bringing the Soviets in was nonexistent. The Soviets had stood in ally with Iraq.

I wonder whether General Horner would have been given such a free hand to conduct the air war as he saw fit if we were still worried about the Soviet Union being allied with Iraq and somehow that if we got ourselves and hit something too much or all of a sudden, we would start World War III. Wasn't it a lot easier in this case, just because of the different political situation, General Westmoreland?

General WESTMORELAND. Yes. Well, you have to remember that we had a coalition in favor of our actions by the United Nations. This was unprecedented in history, the United Nations were staunchly in support of our actions, and we were there as representatives of the United Nations.

Whereas in Vietnam we did have some support from Australia, New Zealand and from South Korea, and eventually, from Thailand and the Philippines. There were over 32 nations that had military troops or military support of some sort on the battlefield in the Gulf. Iraq was surrounded by countries hostile to them, except for Jordan; and Jordan was hostile one day and friendly the next.

So this was a strong coalition that gave us a "carte blanche".

In Vietnam, our country did not have that "carte blanche". In Haiphong there were ships flying the Union Jack up until 1968. I think we should realize, going back to what General Vogt has said, that in 1972, we had withdrawn virtually all of our troops.

Now, that was not done by the Johnson administration; that was done by the Nixon administration. The attack made by the North Vietnamese on the South was in 1975, at which time we had withdrawn all our troops; we were giving them some air support, and that was about it.

So to compare Vietnam with the situation in the Gulf against Iraq is like comparing oranges and hickory nuts—I mean, very, very little similarity.

The CHAIRMAN. Thank you.

Yes, General Vogt, please.

General VOGT. I would like to comment on the proposition that we were concerned about the enlarging of the war. I think that was certainly true during the period when General Westmoreland was commanding down there.

That was—I happened to be in the JCS at the time as Director of the Joint Staff, and I know there were great concerns expressed at the very highest levels about the expansion of the war.

By 1972, however, the President had successfully, I think, nullified the possibility of intervention by either China or the Soviet Union. You recall, he had opened the doors to China and had gotten assurances that they were going to adopt more of a hands-off policy. He had gone and talked to the Soviets and had gotten an agreement from them to lessen their support of the North Vietnamese in the war. I think the possibility of an expansion of the war, all during the 1972 period—which was a very decisive phase, because that is the period the North chose to try to make the knock-out blow, when they came pouring in with all their conventional forces—I think by that time there was no possibility of an expansion of the war.

But still the same restrictions applied, the same sensitivities applied in Washington, the same doubling backwards to ensure there would be no civilian casualties—let the troops take the brunt of all this in the field, let the little guy in the cockpit suffer as a result of the unwillingness on the part of the politicians to take political risks back in Washington.

I can't explain it. It certainly cannot be explained by a fear at this point that the Chinese or the Russians would come in.

The CHAIRMAN. Interesting. OK.

Charles Bennett.

Mr. BENNETT. Well, the reaction I have to what we have heard here, by testimony, is one of appreciation of you fine gentlemen who have done so much for your country and are willing to come before us and tell us your feelings about things that occurred in the past, and the things that are with us today, and are likely to be with us.

It is very easy for people that don't have any responsibilities like you had to feel that they would have done much better about the situation than was done, but with that explained to us, our fine man in the presidency felt that they ought to do the things that they did. The fact that they didn't lead to the success they hoped to have in the past, the fact that in this war, we have had a great success doesn't undermine the character of the people that tried to do the best they could to help their country at the time when they were called on.

I don't know of anybody in the history of that period of time that deserves any condemnation. I think there was an effort made to do what was thought to be right.

I really feel mostly interested in the future. I am concerned that the past, and the life that I have led, at least as I look back on it, has too often not learned from experience and not looked at the right answers that could be taken out of what has happened.

Now, what I feel has happened, and what you have explained so well, is that there was a decisive commander in chief—that is a great blessing—a man who can make the decisions, stand by them, have the courage to take it on his own back. I think we were lucky to have such a fine President as that.

If he be that fine a President and still have a tendency to want to run the war himself, even though he was not equipped to do it

and didn't have the experience and the knowledge or the background to do it, so he could still be a failure and be very decisive. Fortunately, we had a man who was willing to listen to the people that knew what they were doing.

So we are not only fortunate in having a great President that was decisive; we were also fortunate in having one that didn't try to do something he didn't know that much about, and that is a great blessing.

Now, we can't assure ourselves that that is going to be the truth in the future. It would be a pity if we always had to elect a President of the United States to have those qualities. They are wonderful qualities, but there could be—in other times of history, there could be other Presidents that would be there. But the system is a pretty good system.

Now, what I am concerned about and what I would like to ask you about is what we can do in the future and in the present to see to it we don't do what we have done in the past; and that is, when we want a success with certain things in place, we then abandon those things and are not in a position to win another one.

In other words, right now, there is a great clamor to pull down national defense, weaken ourselves without any real substantial reason to believe we can believe that the Russians have changed so much. After all, they are building today one new submarine a month; we are building one a year. They already have more submarines that we have.

They have put their infantry into the Navy, so it won't count as part of the infantry—not all of the infantry, of course, but they have put infantry outfits—they are not marine outfits, they are regular army outfits—and they have done that to deceive us. Admiral Zumwalt has given us other examples of being deceptive. Right at this moment in 1991, as weak as they are, they are still deceiving us.

So what can we do to protect our country in the future? Do we need to have a very careful inspection service to see to it, if we do agree on things, that they are actually inspected, and we don't have to rely upon people's voices.

To what extent do we need to see to it we don't throw money away on duplicative things in our own industries, where we have great pressures on us to respond to the industrial complex that Eisenhower referred to. That is true; you can't escape it.

In other words, it is a part of our fabric in America that we have to listen to pressure from parochial backgrounds and from industrial backgrounds which press us to produce two new bombers at the same time and press us to have two new mobile intercontinental ballistic missiles when we don't even have one yet.

These duplicative, expensive things we cannot afford any more, we know, and so what—with your judgments, since you are mature people like I am, and since we have nothing really to do except give to our country our best judgment, whether it hurts us or not to give it, whether we are—ourselves are somewhat tarnished by giving advice, because people don't want to listen to advice, what is the advice we should give?

We certainly shouldn't give advice to pull down the strength of the national defense of our country, should we? We certainly

shouldn't just rely upon treaties that maybe can't be enforced with doubtful people on the other side. At the same time, we can't afford to spend vast sums of money on duplicative things.

What judgment can you give us as to how we could organize society, how we could protect people in the future to have a strong national defense and, at the same time, not be wasteful. Do any of you have any thoughts along that line?

General WESTMORELAND. Well, certainly your committee shoulders great responsibility, and reflecting on the Vietnam War, I am restrained to point out that the Congress of the United States played a major role in the conduct of the Vietnam War—and I refer to the Case-Church Amendment to the fiscal 1973 Appropriations Act. That Case-Church Amendment is what lost the war for us.

What General Vogt has said, what Admiral Zumwalt has said, and my recounting my experiences are a matter of fact. But it was the Case-Church Amendment that pulled the umbilical cord from South Vietnam and that wrecked their morale and that, in essence, said that we would not provide any further military support to the troops of South Vietnam.

So, turning the tables a little bit on you, Mr. Bennett, indeed, you people do play a crucial role; and it just occurred to me, while you were talking, that we had not made known or reminded you that the Vietnam War was influenced negatively in a very serious way by the actions of the Congress of the United States.

Admiral ZUMWALT. Mr. Bennett, I would support what General Westmoreland said, but suggest that the answer to your question is that, as Winston Churchill said, we are dealing with the worst form of government every invented, except for all the others that have been tried; and there is not one thing that can be done.

It has to be a whole host of things. It has to be the kind of leadership of the Armed Services Committee that we have had in action over the years, which has kept some of the other Members of Congress from doing mortal harm.

I recall, for example, the tremendous support that the Armed Services Committee gave in getting through the Congress, on a 49 to 47 vote in the Senate, an authorization for the Trident submarine, the single most important strategic system we have today which just barely survived because of that kind of leadership on the Senate side and many examples on this side.

But those of us out of office need, as those of us here did, to use our voices to support the President on issues like the Iraq situation. The businesses in this country and in the countries of our allies need to be more patriotic and less greedy in order to help us prevent the proliferation that has been such a tremendous problem to us in this last war. There has to be a constant education from everyone able to give it to keep public support, to keep the public aware of the fact that the kinds of cuts being discussed beyond the current budget agreement will almost inevitably lead to another crisis in years ahead.

General VOGT. I have one suggestion that might be useful to the committee, and that is when the services come in with their requests for funds for weapons systems, ask them one simple question: How flexible is this system? Can it be used in all kinds of

wars, or is it limited to a specific kind? Are we getting our money's worth in versatility and all-around capability, or are we buying something that will work in only one scenario?

Following the Vietnam War, we plunged into a procurement program that emphasized weapons systems for fighting the Soviets on the Central Front. I was the NATO Commander of the Central Region, Allied Air Force's Central Region. All the equipment that was being justified by the Air Force and by the other services was based on the assumption that that equipment was going to be used in a war with the Soviets.

But I submit, extremely heavy tanks aren't going to be very useful in terrain where you bog down in the mud somewhere else in the world; and airplanes optimized to do the job on just Soviet top-line fighters may find that they are optimized in the wrong way, when we have to go in and support bush warfare, compatriots fighting in the jungles of Africa or perhaps, again, in the Far East.

We simply cannot afford specialized weapons any more. We have to have weapons systems that can do the job wherever they are sent. Because nobody in this room can with any certainty predict where we are going to be involved again. So I would ask that you scrutinize all the requests with that one thought in mind: Can it do the job wherever that job may have to be done?

I would exclude from that formula only the strategic weapons systems that are involved in the exchange, the nuclear exchange with the Soviet Union. We are talking about weapons designed just for that purpose. My rules don't apply; you have to apply others. But all the vast procurement that the Defense Department engages in—and, incidentally, it is about 80 percent of the total budget, about 20 percent going into the latter category—that 80 percent, out of those forces and the money allocated to those forces, we must demand maximum utility, regardless of scenarios.

Mr. BENNETT. Yes, General.

General WESTMORELAND. I think we are moving into an era the likes of which the world has never seen before. We are moving into an era of Pax Americana.

There is no question that we are the most powerful Nation on the Earth with no serious competition. There is really no serious threat to us. How we conduct ourselves and how we configure the military forces in that we do not have something, as we have had in the past, like the Soviet Union to focus on, that we are the senior military power in the world, which carries the danger that we are going to become too complacent and our defense budgets will be cut seriously, and maybe drastically.

Because I think the body politic is going to say, where is the threat? Why do you need an Army as big as we have had in the past, the Air Force and the Navy? Why do you need these sophisticated weapons systems? I think this is a major challenge that this committee faces, how are we going to sort it out and protect our future, recognizing that we are in an era of Pax Americana, and do it in such a way that we don't appear, internationally, to be arrogant, that we don't appear to be a dictator to the world, that we don't throw our weight around the United Nations to the extent that we might.

I think this committee is at a crossroads, and I think you are going to have one of the most difficult situations to deal with that you have ever had.

Mr. BENNETT. One cautionary thought that runs through my mind, as I look at history—and I am an amateur historian myself—it seems to be, from what we have had here today a great affray about the fact that we have a very fine President who acted excellently under these circumstances of conducting this war, allowing the military people really to make the basic decisions.

But one of the greatest Presidents we ever had was Abraham Lincoln, and if he had listened to his advisors, the South would have won.

General WESTMORELAND. I thought you were from Florida, Mr. Bennett.

Mr. BENNETT. Yes. Well, he had a lot of trouble with his military advisors, and so he had to take it in his hands and run with it, even though he was a man of no real military experience.

He fought in the Black Hawk War, I think, and I think the most interesting thing he did in that war was to make a command decision when he had to move a platoon from one side of a fence to the other. He didn't know how to give the proper order, so he fell back on one side of the fence and told them to fall back on the other. So he took care of that. But that was the only military decision he had made before he went to the presidency, I think.

But anyway, if we made a cheap shot at it and said the President ought to just take a general direction and leave it up to the generals, well, General McClellan was very anxious to have that opportunity, and I am not running him down as far as his character is concerned, but he was not a man who was willing to close with the enemy very often. He may have had good reasons for that. He may have been very compassionate or thought it was unwise; and maybe he was wise. But anyway, he was not a man who liked to close with the enemy.

Now, you have given me some thoughts about what we ought to do. You say that we ought to be, in Congress, since we are elected to be leaders, we ought to see to it that we do lead in the field of war. I have a little problem about that.

The Constitution says that it is Congress who decides if we should go to war, and of late, Presidents have decided that they were going to be the ones who decided that, and not the Congress. That constitutional thing has to be looked at.

I hope in the future there will be a revision of going back to what the Constitution says, because I think it is unwise for us to go too readily to war; and I think that our forefathers were sound in putting in the Constitution that it is only Congress that can put you into a war, except in the case of defensive action.

So there are real problems like that, and they take a little courage to say in 1991; it is not easy to say when you have a popular war. Everybody is happy with the way it was won, but I am not happy with the way we approached it, the way we approached other wars that we have had in recent—call them “no-wars,” if you want to, but they were wars and people lost their lives in them, on our side and the other side. They were not decisions by Congress. I think that is something that we ought to be careful about.

We ought to be strong. We ought to be able to win a war. But we ought not to too readily go to war. That is something that our forefathers thought was wise to keep us away from, putting it in the hands of Congress. People don't like to hear Congress debate things, but in a democracy, you have to debate things and try to come to the right conclusion.

So my reaction to—this war has been a great success as a war, but it has not been a great constitutional success, because it was really asked for without the consultation—the consultation was done with allies and with the U.N., but not with Congress, and Congress has a responsibility to decide whether you go to war.

That is not easy for me to say, but I must say it, because I am an old man who can't be hurt. What can you do to me? But I can say what my conscience tells me; my conscience tells me that our country should not readily go to war unless it has to, and therefore, it should follow the Constitution and have these things decided like our forefathers thought they should in the Constitution.

I have no further questions.

The CHAIRMAN. Ike Skelton.

Mr. SKELTON. Thank you, Mr. Chairman.

Gentlemen, I welcome you, and we are indeed privileged to have you and your advice. Your presence is a real treat for this committee to have the opportunity to ask you some questions.

General Westmoreland, I think you are right. We are beginning on an era of Pax Americana. We are it; we are the ball game for security in this world, whether we like it or not. I am concerned, and I would like to have your thoughts and advice, gentlemen, on where we go from here.

As you know, the budget process has already spoken of cutting over the next 5 years our military force structure by some 25 percent, and that is the same decline that was announced by the President, incidentally, on the same day that Saddam Hussein went into Kuwait.

The war in the Middle East is not viewed as a lesson or a cause to change our decline in force structure. I would appreciate your thoughts and advice on how wise this is; what cuts, if any, should be made; or where we should go, if each of you had a crystal ball and a magic wand to make this Pax Americana come to pass, as best we can.

Since you turned the phrase, General Westmoreland, we will let you answer it first, sir.

General WESTMORELAND. Well, it is quite evident that the time has arrived when military forces can be cut. The size of the cut is debatable. Where the cuts should be taken is going to be the most difficult decision to make.

I think we have learned from the recent conflict—I won't call it a war, but a campaign—in the Middle East, that it is important to allow the military to fight the battle. But it is up to the Congress to give the military the tools to fight that battle.

Mr. SKELTON. Under the Constitution, that is right.

General WESTMORELAND. Correct.

So there is tremendous responsibility on the shoulders of the Members of this committee. You are going to find, of course, as you hear from the representatives of various departments, that every-

body is parochial in some respects and nobody—I mean, the Navy would like to maintain their presence and the Army would and the Air Force, likewise.

It seems to me, to make that type of judgment, albeit extremely difficult, you have to start out with, what is the threat? I mean, can you look into a crystal ball and find out, where will our prerogatives be damaged by future developments? Then decide the type of forces that would be needed in order to cope with that particular matter.

But, of course, you must realize that your crystal ball is going to be considerably cloudy in many respects. While there is no question that the control of the seas is very important, it is a matter of historical fact that wars are always decided on the ground. Of course, air power was a great success and was, in effect, the victor in the Gulf.

So it seems to me that we will continue to need an Army, a Navy, an Air Force, and a Marine Corps, but configured in a reasonable way in order to cope with problems that seem to be possible or probable as you look into the future.

So my suggestion is that there be some real soul-searching as to, what are the possible threats, as a starting point. Having done that, you are in a better position to determine the type of forces needed in order to cope with that threat.

But I would also advise that you have an x factor involved too, as a matter of safety.

Thank you.

Mr. SKELTON. Thank you.

Admiral, I would ask you the same question. If I recall in your testimony, sir, you have said that there is the possibility of a reconstituted Soviet threat of some 50 percent. If I quote you correctly, would you add that into the equation of your answer?

Admiral ZUMWALT. Yes, sir.

I agree with General Westmoreland that there is no question but what the military cuts, to some extent, are justified, because today Germany is reunified and Eastern Europe has been released from the Warsaw Pact. But there are still Soviet forces deployed forward in all the former Eastern European Communist satellites, and the Soviets, notwithstanding Gorbachev's promises to the contrary and some arms control commitments, are cheating. They have violated both his announcements and the agreements.

Although they would not be as fearsome if there was suddenly a hard-line coup today, as there were before their situation in Eastern Europe, nevertheless, the 25 percent reduction that our armed forces are taking is, in my judgment, greater than is prudent.

Mr. SKELTON. What would your recommendation be, rather than 25 percent, Admiral?

Admiral ZUMWALT. I would have thought no more than 10 percent until the Soviets have carried out their commitments, and then the rest.

We, as General Westmoreland said, have to measure ourselves against the threat and the hardware, and the armed forces sizes have not yet been seriously reduced from what they used to be in the Soviet Union. Beyond that, there is no doubt in my mind but what the public mood today is to go beyond those cuts, and a great

deal of education is going to be necessary to prepare to withstand additional cuts, unless there is quite a bit of change in the Third World.

We face a situation in which we are going to have less forces than Asad of Syria or Kim Il-Sung of North Korea, with regard to ground and air. That is a very dangerous situation.

Mr. SKELTON. Thank you.

General Vogt.

General VOGT. Well, I agree with General Westmoreland that we should do our best in trying to see what is on the horizon, but I submit we have been quite unsuccessful in the past to do this. I note that up until 2 weeks, or even less, of the outbreak of the attack in Kuwait, the intelligence community was maintaining that Saddam Hussein would never invade Kuwait. So even our best experts can't tell us with any reasonable certainty what we can expect in the future.

As I look at the possibilities facing us in the future, I see situations that could definitely, in remote areas like Pakistan and India—here are two adversaries that have been on the edge of war several times, could be again—nuclear powers introducing entirely new equations into the war. Involved in a conflict like that, we would face problems that we have never faced before.

I cannot say that we are going to be fighting a war in that area of the world, but I would have to tell you that it is my view that there is a possibility of it. We had better think in terms of what our role will be, if any, and the kinds of forces that would be needed in that kind of conflict.

It gets back down to what I said before. We are a world power now; we will be playing a major role in all future conflicts, and our forces had better be procured, designed, and tailored, equipped and made ready to fight under a whole range of scenarios, right across the board—from nuclear war, such as we might face in Pakistan and India, to an outbreak again of hostilities in Ethiopia.

Flexibility is what is required. We have to get every dollar's worth of capability out of every dollar we spend on our military forces. Is this piece of equipment going to be useful in Pakistan, in India, or is it only going to be useful on the Western Front of Europe? Ask ourselves that.

We cannot afford the luxury of buying a whole set of equipment for this war and a set for that war. We have to get the most out of every dollar we spend. If we do that, then I think we can reduce the total force structure; we can take some reasonable risks; we can reduce the amount of money spent on the defense program.

I think this has to be done. We have to face the reality of the long-term future. We simply cannot go on with questioning defense burdens that will skew our economy to the point that we can't sustain it. So that means getting the biggest bang for the buck, the best you can get out of every piece of equipment you buy, and the most highly trained forces, even though the numbers may be reduced, be willing to put money into quality—quality of your manpower, the quality of your equipment, and certainly buy that flexibility.

Mr. SKELTON. A while ago, General Vogt, you made a comment about long legs and possible lack of bases. Would the B-2 airplane fit in that category?

General VOGT. Yes. But I was making the comment with regard to the tactical forces, primarily.

Mr. SKELTON. I see.

General VOGT. I don't think we want to procure B-2s to fight guerrilla wars in Africa, but we may be facing base problems in that area of the world or elsewhere. I was thinking more in terms of airplanes that would be replacing the longer-leg birds we have now, like the F-111 that is getting very old, and we just canceled the Candidate program, as you know, the A-12 that would have done that.

So somewhere along the line, we have got to face up to putting more legs in our tactical force. That means pushing the state of the art of our technology to the point that we can get the range, and it certainly means keeping our tanker force up to speed, so that if we have to refuel, we can do that. Or a combination of both.

Mr. SKELTON. Thank you so much.

The CHAIRMAN. Let me just follow up on one question that relates to some of the things we have already been discussing, and that is the differences here in the enemy that we faced in the case of Iraq versus Vietnam.

In Vietnam, it was a guerrilla war until, as General Vogt pointed out, eventually it became fighting the North Vietnamese regular divisions. But for a long part of that war, it was fighting the guerrilla warfare. Clearly, they put up a much tougher struggle than the Iraqi forces did.

I wonder if you could help us understand why you think that was. I mean, what are we dealing with here? Again, what is the moral for this for the Pax Americana role that we play?

I mean, the one case seemed to be a situation where there was a certain amount of sympathy in the population for the Vietcong. In this case, the Iraqis had invaded Kuwait, and they were clearly the enemy. They also wore uniforms which were essentially identifiable.

In other words, I sense that the very nature of the enemy here is very different. What is the moral of that story for Pax Americana? I mean, is what we are saying, we can deal with regular army forces or regular forces, but it is harder to deal with the guerrilla forces, that you just have to make some kind of a judgment about the state of politics in these countries, or—Admiral Zumwalt, and then the rest.

Admiral ZUMWALT. I think that in the case of the Vietnamese, you had the fervor of a revolution against a colonial system reinforced by the brainwashing fervor instilled by young Communist ideology. You can see the same phenomenon in the early days in each of the Communist revolutions.

As time passed and they realized how different was the promise from performance, it began to attenuate; but it was still there with regard to the Vietcong and the NVA when we were fighting them.

In the case, on the other hand, of Saddam, he has ruled by abject terror. He has slaughtered anyone who has spoken against him,

even his closest associates, and the system is one of absolute fear and terror.

My son, who is a lieutenant colonel in the Marine Corps Reserve, interrogating some of the early defectors, asked one of them, "What is your profession?" He said, "I am a professional prisoner."

He said, "What do you mean by that?" He said, "I defected in the first week of the Iran War, and here I am in the first week of this war. That is how I survive."

Subsequently, when they got the big numbers and interviewed them, they found they were turned off by, A, the invasion of another Arab nation; but B, and far more important, they just thought that Saddam was a monster.

The CHAIRMAN. General Westmoreland.

General WESTMORELAND. Mr. Chairman, first, I would like to clarify some of your initial statements.

It is quite true that guerrilla warfare was quite prevalent in Vietnam, but so was conventional warfare. The North Vietnamese started moving down well trained, well armed, uniformed troops as early as 1964, and the pace of that movement stepped up to the point that at the time of the offensive in 1968, they were sending down divisions which were well armed, well equipped with Soviet weapons. They came down the Ho Chi Minh Trail and then stayed in Laos, which was off limits for us, or in Cambodia, which was also off limits for us.

Then at the time of the Tet Offensive or other times, they moved across the border and they fought conventional types of battles. But at the same time the trained guerrillas by North Vietnam were prolific throughout all the provinces, to some degree.

So it is true, it was guerrilla warfare to a considerable degree, but there was also a major significant army of well-trained, well-equipped troops, which surfaced from time to time, their haven, of course, was across the borders in Laos and Cambodia.

De facto, it seems that we have become the world's policeman. It does seem that there is a new and another development, which I think is gratuitous, and I hope it persists; and that, namely, is a new age or new attitude by the United Nations. The United Nations coalesced in our efforts in the Middle East, and if we are politically skillful enough and we can maintain some influence in the Security Council of the United Nations which could be very helpful to us.

In the spectrum of warfare from guerrilla warfare to main warfare, main warfare, of course, persists; but I think our force structure has pretty well kept abreast of trends in that the Army, back in the late 1950s, started the Special Forces. The Special Forces have been expanded since then, and in recent years, they have become a unified command.

So we do have a unified command involving Special Forces that are specially trained and equipped to deal with, say, small bushfire wars or insurgency activities. It would seem to me that, as you look on the future and decide what type of force structure you, the committee, want to support, that the support of the Special Forces command should be very high on your priority list.

Ho Chi Minh was a charismatic leader—there is no question about that—in contrast to Saddam Hussein, as Admiral Zumwalt

has pointed out, who rules by terror. Ho Chi Minh unified his people by an ideology. But it is not an ideology that has persisted. It is not an ideology that is particularly popular in Vietnam today. It is an ideology—I believe that it seems to be fading by degrees off the world scene.

To the extent that we want to get involved, as alluded to by General Vogt, in a war between Pakistan and India, is very questionable in my mind. I mean, they have been fighting for years, and they will continue to fight for decades and even centuries. To what extent we would want to get involved in that type of Middle East internecine warfare, I think is questionable. Personally, I think we should try to stay away from it. Anything we do in that international context or assembled international context should be under the auspices of the United Nations, and certainly not directly by us.

The CHAIRMAN. Any comments, General Vogt?

General VOGT. I want to echo General Westmoreland's words in support of Special Forces.

A couple of years ago, the Secretary of Defense asked me to do a study on our Special Forces of all three services, which I did; and I was somewhat disappointed by what I found. The fact of the matter is that the Special Forces, each year, are the forces—are the first ones that take the cuts in the budget reductions, and we wind up with pretty obsolescent forces.

For example, in the case of the Navy, our Seals don't even enjoy anything near the sophistication of the SPECNETS Naval forces, who are in sophisticated submarines and can do all kinds of jobs in the fjords of Norway and Sweden and elsewhere, that we couldn't accomplish ourselves today.

It is true of Air. Our Air Forces, we take old airplanes and we reconfigure them to C-130s and things of that sort and get extra life out of them and try to adapt them to the mission. But by and large, they are not state of the art.

In the case of the Army I discovered, for example, when I did this study that they didn't have a simple weapon like a Sharpshooter rifle, often so valuable in the kinds of special warfare operations that they conduct. They were only beginning to look into what kind of a weapon would be suitable for the Army to be equipped with to do this job.

I discovered, as I wandered through the maze of all this, that the Navy was developing a Sharpshooter rifle of their own, totally independent of the Army, even though the use would be very much the same. So there is duplication, and they have lagged.

But generally, if we see situations developing in Third World areas that are at a political, semimilitary level, and that can be arrested by the introduction of Special Forces, we certainly ought to resort to that early on, instead of waiting until it mushrooms into a much bigger war.

In the case of Vietnam, it is true, as General Westmoreland said, that North Vietnamese were engaged in the fight in South Vietnam long before they acknowledged it and long before this country recognized it. General Westmoreland was telling us that they were there, indeed, and our own people here in this country were saying, "No way. These are pure Vietcong."

The fact of the matter is, they had regular units down there.

But in 1972 the character of the war did dramatically change. We had stopped the bombing in the North in 197—or 1968, gave them a period of respite, and announced the new victimization program. We say we were going to withdraw and turn the war over to them.

The enemy took this as a signal that they could now begin to prepare for the knock-out blow, so that when Easter 1972 came and they launched that offensive, it was with a force that had been in preparation for some 2 years, and it was a force that, for the first time, had T-54 heavy tanks rolling across the border, with sagger wire guided missiles never before used anywhere in the world. That later became a famous weapon in the war in the Middle East with the Arabs and the Israelis. That was introduced in 1972 by the North Vietnamese with devastating effect.

In its first use, for example, an entire South Vietnam division broke and ran, abandoned their tanks in the face of one weapon system introduced now by the sophistication of the North Vietnamese forces, artillery never before seen in Vietnam, used with devastating effect, 130 millimeter gun that outranged and outfired anything we had deployed there, and rapidly reduced our fire support bases to rubble.

So the war changed. It became technologically a vastly improved North Vietnamese force. It was a concerted effort, obviously designed as a knock-out blow to be timed with our withdrawal of U.S. forces. The fact that we were able to put it all together and turn this invasion off, using just South Vietnamese forces with U.S. advisors, alone, and American airpower—Naval and Air Force—is a tribute indeed to the capability of the South Vietnamese and our own ability to provide that support.

I think early introduction in crisis situations around the world, if indeed Pax Americana is here, is necessary; and we have to have forces designed to do that. I agree with General Westmoreland, we have to take a good, hard look again at the priorities we give to our Special Forces.

Admiral ZUMWALT. Mr. Chairman, I strongly support that position, too.

The SEALS in the Navy, I became very devoted to as a result of my command of the Naval forces in Vietnam—there were cases where, when we put a squad of SEALS in, two whole companies of Vietcong moved out of an area until the SEALS had left. They were feared as a tremendous group of fighters; and they need all our support, and I regret to say that they have not been given adequate support in subsequent years.

The CHAIRMAN. Let me ask this question. General Vogt just about got to it, and it is the last question I have on my list.

But what is the moral of the story here, looking at the war in Iraq and comparing it to the war in Vietnam? What is the moral of the story as far as the quality of equipment compared to the quality of the Russian equipment—or in the case of Vietnam, I guess they were getting Chinese equipment, too—and are we keeping our technological edge? Are we increasing our technological edge? How does the quality balance look to you?

Have you any thoughts about the quality of equipment that is coming out of this experience?

Admiral ZUMWALT. My reaction would be, first, that our equipment is an order of magnitude better. As you would expect with modern hi-tech development, we performed much better with our equipment than the Soviets' equipment performed for the Iraqis. But that is for two reasons: one, our equipment was somewhat better; and the other is that the Russians would have fought their equipment better than the Iraqis fought Russian equipment.

The CHAIRMAN. General Westmoreland.

General WESTMORELAND. In Vietnam, basically we had weapons and equipment that were World War II vintage. The same equipment that was used in the Korean War. Some upgrading, some new equipment, such as the M-16 rifle, which replaced the M-14 rifle, on the battlefield, but the troops were initially equipped with the older rifle, but the M-16 replaced it over a period of time. But the time frame was about 2 years. In due time we were able to equip the South Vietnamese army with the M-16.

In the gulf, it was a high-tech war. We saw the payoff, the fruits of the high-technology weapons and means of transportation as provided by congressional appropriations. That was particularly evident in the effectiveness of the bombing and the accuracy of that bombing.

B-52s. We started using them in support of ground troops in Vietnam, and they were used again, of course, in the Gulf. But the accuracy was far better. General Vogt can probably be more specific as to the degree of greater accuracy and why, which I cannot address. But apparently pattern bombing was far more effective than in Vietnam.

Now, meanwhile, the Iraqi troops were better equipped than our enemy in Vietnam. After all, Iraq was one of the wealthiest countries in the world by virtue of its oil resources. But Iraq had an assortment of weapons. They had them from the Soviets, the Argentines, et cetera, which I am sure complicated their situation.

I doubt that they were sophisticated enough to proficiently handle such an assortment when it came to maintenance and spare parts and things of that sort. They were really, I would say, a backward, almost a World War I type of army in view of the trench warfare they were involved in when they fought Iran—reminiscent of World War I. The mentality of the soldiers was that of World War I, but supported by high-tech weapons. It was a strange combination, and one that was obviously not very effective.

General VOGT. I will address my comments to the air war. People have asked, why did the Iraqi air force adopt the tactics that it did, which was basically to stay on the ground when the air attack came, try to ride it out? Why weren't they up there fighting?

In North Vietnam, every time we went in, there were a swarm of MiGs all over us. They were willing to engage in the fight. These people adopted a different tactical strategy. In trying to find the cause for this, first, as General Westmoreland said, they bought a hodge-podge of high-technology weapons, but then were unable to integrate them into a total system that would do the job the way you have to do it.

For example, they had Soviet AWACS in there able to track all our air strikes. From the moment they took off from their air bases, the tactical surprise we achieved would not have been achieved.

If they had pilots trained to fly Soviet equipment at night, they would have made a difference. They certainly must have realized the first bombing attack on Baghdad was going to come at night. As you know, it came during the early hours of the morning. But their pilots didn't have night time, and they did very little night flying.

Their shelters had been built by the Yugoslavs, the shelters for the airplanes, and they were quite good. But nobody told them that our weapons could penetrate these shelters and destroy their airplanes on the ground. So they sat there thinking they could ride out the attacks, only to find out their shelters could not protect their airplanes. Then they had no recourse except to flee and get out of the country, which they did in going to Iran.

I think what I am saying is, if they had completely integrated Soviet systems and capability, trained as the Soviets undoubtedly have trained there, it would have been undoubtedly a different situation.

The MiG-29 is a first-rate modern flier, on a par with the F-16. There is no reason in the world why it couldn't have done a real job on us if it had been employed successfully, if all the elements of an air defense system which should have been there were.

So that edge that we had would have been far less marked if the Soviets had trained the Iraqis. We were fortunate in having second-rate-trained people flying the Soviet equipment.

The CHAIRMAN. Thank you.

Neil, do you have some questions?

Mr. ABERCROMBIE. Thank you very much, Mr. Chairman.

Aloha to you, gentlemen.

I would like to follow up on just a couple of points, which I think will amplify the Chairman's questions and some of the answers that you have given. One theme that seems to run through all of our commentary is that whether it is with respect to Vietnam or with respect to Iraq, or any of the potential other conflicts that might occur in the world, is that it is a disservice to the United States military to substitute military action for a comprehensive and understandable policy.

In other words, we find ourselves in a situation of making political policy, whether at the executive or the legislative level, and then expecting either the consequences of that policy or the lack of such a policy to fall to the military to implement, if there is a vacuum in it.

What I want to pursue, then, is some policy that we have the opportunity to establish now in the wake of Iraq and in the wake, for that matter, of the Vietnam conflict, the Vietnam war.

Admiral, you have mentioned the sealift capacity at one point. You mentioned—more than mentioned. You mentioned control of the sea lanes.

I also sit on the Merchant Marine Committee and I have been distressed to see the disparity between what is being discussed here in the Armed Services Committee and what is being discussed from

the point of view of policy in the Maritime Administration with respect to our ability to have a viable merchant marine and its connection to what we may or may not be capable of doing in terms of providing material and personnel in any of the potential conflicts that you have all cited.

So my question in the context that I have just outlined is, can you give us a bit more explicit recommendation or observation with respect to sealift and a viable merchant marine in the United States of America?

Admiral ZUMWALT. Yes, sir. In my judgment, there is a role for Congress to play in forcing separate agencies of the executive branch to work together in a way that they have never successfully achieved in the past.

When I was Chief of Naval Operations, I tried very, very hard to work with the maritime administrator, and each of two there were very interested in working with the Navy but we were unable to bridge the bureaucracy in the executive branch to get authority to work together on what is a readily achievable program to provide subsidies for the merchant marine, that is, to permit the Defense Department to pay for the extra capability that goes into a merchant ship so that it is useful in wartime.

That could result, in my judgment, in enough of a subsidy to make up for the difference in the costs of building overseas versus building here.

Mr. ABERCROMBIE. I do believe that is so important. Would you object to my characterizing or substituting the word "investment" for "subsidy," that this would be seen as an investment by the United States, and in the interests of national security, to invest in a merchant marine that might otherwise find itself having to compete in a world in which other nations are obviously subsidizing their merchant fleets?

Admiral ZUMWALT. That minor change shows why you were elected and I was defeated. I support the change.

Mr. ABERCROMBIE. But we are in agreement, you and I, that such a situation does not exist today? Is that a fair statement on my part?

Admiral ZUMWALT. It does not, and our merchant marine continues to deteriorate, and as I said in my opening comments, I think we are faced with a situation where in the future, if we haven't subsidized or, let's say, invested, we would have to seize foreign ships in wartime.

Mr. ABERCROMBIE. Thank you.

I don't know whether the other gentlemen would like to comment. It is not necessary.

General VOGT. We do have a parallel, of course, in the Air Force, and that is the civilian air fleet, so-called CRAF program, civilian Air Force Reserve units, where we can call them up, and do. This has been very successfully used previously by the United States. We have counted on our commercial air to provide lots of tonnage support for us. They were a major participant in the war and in support of the Israeli victory in 1973, when we called a lot of stuff into the Middle East in a very short period of time on commercial airplanes.

My fear now is the same thing may be happening to our commercial air fleets that is happening to our commercial naval capability. The fleets are financially in trouble. They are going bankrupt. We are taking airplanes off the line, moth-balling them. We may find ourselves in the same situation that we find with respect to the merchant marine, and I don't know how you address this.

This is a problem way beyond the Defense Department. It is a problem of how we can economically keep our air fleet viable.

I do note, however, that other countries heavily subsidize their—in many cases, heavily subsidize their airlines and keep them viable that way. We may have to start taking a look at that, clearly from the Defense Department standpoint.

General WESTMORELAND. I have nothing to add.

Mr. ABERCROMBIE. Thank you.

Just one more, Mr. Chairman.

Again, I think perhaps led by General Westmoreland's comments, we are trying to draw political lessons with respect to the military policy, successful or unsuccessful as you may or may not define it in any given instance. I think that General Vogt, you made a particular point of failure to carry through, in one instance, on the cease-fire.

Without—and I mean no pun—without refighting the whole idea of whether we should have been in Vietnam or whether it is a civil war or what the history of it is, or for that matter, arguing about whether or not we face a Balkanization—or is there a new word now, Mr. Chairman, Lebanonization, has that been invented in the last day or two—without asking you to become assistant historians, cultural historians, if you will, or even psycho-historians, and the context that I established in my original questioning of trying not to substitute military action for political policy, I am very concerned that we may have at least as far as the popular media is concerned, a conclusion in the Nation that it is quite possible for us to initiate and carry on military action, such as troops in Iraq, and that becomes in and of itself our political policy. That by definition now, "the war is over."

My own view is, and I think that it is shared at least by some Members and possibly the Chairman as well of this committee, that this war is not over in Iraq, and that the United States military is now being called upon to exercise its capacities and its powers in a way that constitutes very directly political policy.

Without any clear understanding, either by the military in terms of orders being given to it or a clear understanding by the American people in terms of a discussion and conclusions that have taken place as to whether or not the actions of our military at this stage of the war in fact constitute our political policy.

In other words, what is our political policy? I refer specifically to the Kurdish situation.

My own view is that, and I think all of you have expressed this in one form or another during your comments, that Saddam Hussein is at least as strong as he was before or stronger in terms of his determination to dominate that area by brute force, by terrorism, by the imposition of killing in any respect and at any time that he thinks it is necessary to keep power.

So my question is, what lessons do you think we should draw today, right now, from the failure, in my judgment, to carry through on the political implications of this military victory?

I believe we are in the middle of another campaign right now, and we think it is all over with. I think militarily we are being asked to carry out the post-campaign politics in Iraq, and the United States military is going to have to intervene to do that.

Admiral ZUMWALT. I guess my view on that is that it was a very tough decision that the President faced as to whether or not to stop when he did. But I supported it because I felt politically he would be in a very tough position with the Democratic Party and with the people, had he gone beyond the charter he had been given by Congress and by the United Nations.

As Commander in Chief he was being very conscious of the fact that casualties were low and he didn't want to take on the much higher casualties we would have had had we gotten involved in street fighting in Baghdad.

Even having done that, Saddam, having escaped to the suburbs of other cities, would have carried out essentially the same kind of activity, and we would have had our problems in dealing with the Shiite rebellion and the Kurdish rebellion in any event.

My own analysis of the current situation is that Saddam is acknowledging defeat by carrying out the orders. He understands that we mean it, as he did with respect to fixed-wing aircraft once we shot a couple down, and as he did when he evacuated his police yesterday.

I think the problem we have is the political problem that once we have nursed the Kurds back to health and out of the mountains and into the plains, and have turned the effort over to the United Nations, and once the United Nations forces leave, Saddam will go in and shoot the key leaders and many others of the Kurdish group just as he has in the past.

So I am afraid we are in for the long term, or we will face the consequences of the ultimate defeat of our objective as the people are turned back over to Saddam.

Mr. ABERCROMBIE. I know you wanted to speak, General Westmoreland. Excuse me.

Is it fair, Admiral Zumwalt, for me to conclude from your remarks that you believe the United States military, even in a role established under United Nations' auspices, will not soon be out of Iraq per se?

Admiral ZUMWALT. I believe that a likelier possibility is that non-U.S. forces will take over under the umbrella of the United Nations, but that they will be stuck there for quite some time, and U.S. power will have to guarantee that commitment.

Mr. ABERCROMBIE. U.S. power in the form of troops or air support or both?

Admiral ZUMWALT. In terms of the readiness and deployment of some force in Turkey and in the Mediterranean, the Red Sea and in the Persian Gulf.

Mr. ABERCROMBIE. So decisions made by this committee in terms of recommendations to the rest of the Congress and the country have to have that in mind?

Admiral ZUMWALT. I would hope so, yes, sir.

Mr. ABERCROMBIE. Thank you.

General.

General WESTMORELAND. Indeed, there is a reciprocal relationship between public policy and military action. As an example, to reflect back again on the Vietnam war, after the defeat of the Tet Offensive which took place in early 1968, where we had a fine, well-equipped, well-trained Army on the battlefield, if we had used air power against Hanoi as was done 4 years later, the enemy, I think, would have had no choice but to come to the conference table.

All the trump cards were in our hands. The enemy would have had to come, in my opinion, to some agreement. But if that had happened, of course, if an agreement had been arrived at, we would have had to maintain troops in the area to support that agreement, as we now continue to do in Korea.

As far as stopping the war 1 day earlier than some people feel should have been the case in hindsight, perhaps that would have simplified the situation that we now face. But I don't believe it totally.

Inevitably, any student of the situation will realize this, that the aftermath of the fighting was going to get us involved—at least initially militarily, and long term, very much politically.

So actually, we have stirred up "a hornet's nest" in that part of the world. I think one has to take ones hat off to Secretary Baker for his efforts to bring about, some kind of coalition of thought to stabilize the area. But as of now, I am sure he would express himself as being disappointed. I am not sure that that is going to change.

So the point is, military action in this case has a reciprocal political action. We see that going on in the Middle East. It is kind of a toss of the coin as to what direction that situation will turn to.

Mr. ABERCROMBIE. Is it fair to conclude from your remarks that the American people need to understand that victory in this military campaign has not resulted in a conclusion of the political consequences in Iraq which may involve the United States military to some degree and for some length of time in the future?

General WESTMORELAND. Well, at this time certainly the political situation in Iraq has not changed and I don't think will change until something happens to Saddam Hussein, at which time it could change.

Mr. ABERCROMBIE. Thank you very much.

General VOGT. My view has been from the beginning that the primary cause of this particular problem in that area was Saddam Hussein. It was my view, and I so expressed it to various people before we got involved, that we should say to Saddam Hussein, "Get out of Kuwait or your regime is in jeopardy."

I would have put it on the line and said, "It is not a simple question of getting out of Kuwait. Once you go in, it is a question now of your demise."

I don't think that leopard will change his spots one bit. I think he will continue to be a constant source of trouble to us. I think he is beginning to regain some stature in the Arab world. I think he will make motions now and signs of acquiescence in the U.N. conditions and our demands. But when the dust is settled and we are

back home and U.S. forces are largely out of there, and a few U.N. peacekeeping forces are left behind, they will prove to be as ineffective as they have been in previous crisis in peacekeeping roles.

We have to face up to the fact that we are involved now and it is going to be a rather long, drawn-out affair because we have let this man survive.

I appreciate the President's position on this. He had a mandate from the U.N. and from the Congress to do one thing, and that is to get Saddam Hussein out of Kuwait. It is questionable whether he would have had the support from the American public and the Congress if he had said, as I recommended, that he should go in and remove the threat that he poses.

Mr. ABERCROMBIE. I think you have put your finger on the reason why there was such a debate in this Congress. I think the Chairman would agree, from August on, to say what precisely was going to be the object and what were going to be the implications if we went to war. I appreciate your summation of that.

Thank you very much, Mr. Chairman.

The CHAIRMAN. Thank you.

Gentlemen, thank you very much. Admiral Zumwalt, General Westmoreland, General Vogt, very interesting, very helpful, fascinating morning. Thank you.

[Whereupon, at 11:55 a.m., the subcommittees and panel adjourned.]

MILITARY REFORM AGENDA IN LIGHT OF OPERATION DESERT STORM

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
DEFENSE POLICY PANEL,
Washington, DC, Tuesday, April 30, 1991.

The panel met, pursuant to notice, at 10 a.m., in room 2118, Rayburn House Office Building, Hon. Les Aspin (chairman of the committee) presiding.

STATEMENT OF HON. LES ASPIN, A REPRESENTATIVE FROM WISCONSIN, CHAIRMAN, HOUSE ARMED SERVICES COMMITTEE

Mr. CHAIRMAN. The meeting will come to order. Today the Defense Policy Panel continues its hearings on what the Gulf War tells us about how to provide a defense that meets the real threat for the future, a defense that works.

Our focus this morning is on the status of the military reform debate. It has been a decade since the issue debuted in the *Wall Street Journal* Op Ed written by then Senator Gary Hart who joins us today as a witness. That article, the seminal article, I think, in the reform movement, identified the key challenges as reforming "the very basis of the armed services, the way they make decisions" to "develop an ongoing process of change and adaptation which must characterize an effective military."

To achieve this, the early reformers contended change must center first, on people; second, on ideas; and third, on hard work. The early reformers believed our military officers should be warriors, leaders, and strategists, not bureaucrats. They criticized the Pentagon for misguided education, promotion, assignment, and rotation policies, and for a bureaucracy they believed stifled innovation.

As for ideas, the reformers promoted the concept that the military should win wars by maneuver rather than by attrition. They believed that the military doctrine in effect at the time stressed overcoming enemy strengths rather than exploiting his weaknesses.

Finally, the early reformers argued that technology should increase innovation and effectiveness in weapon systems. Technology should render enemy strength obsolete, rather than reinforce traditional ways of fighting them. Using a larger number of less sophisticated weapon systems was also a much discussed corollary.

Ten years have gone by since those arguments were first made. We have raided Libya, fought in Grenada, Panama, and Saudi Arabia. In this latest context, the performance of our troops was

outstanding. Our military leadership developed and executed a plan to shape the battlefield so we could exploit Saddam Hussein's weaknesses, not play to his strengths. We relied on maneuver and deception, and our weapon systems seemed to work in large part, as advertised, rather than as criticized.

This morning's hearing seeks to revisit the criticisms and recommendations of the early reformers, and their opponents, in the light of Desert Storm. What does the war tell us? Did the reform movement have an impact on our victory in the Gulf? What are the lessons for our future force?

We welcome today as our witnesses a very distinguished panel. We have, first of all, Col. John Boyd who is the author of the Air Force fighter tactics manual and the inventor of energy maneuverability as a criterion of fighter design. We have former Senator Gary Hart, who as I have already said, was the author of the seminal article on the military reform. We have John Lehman who is a former Secretary of the Navy. We have Donald Hicks, a former Under Secretary for Defense for Research and Engineering.

Gentlemen, thank you for being here.

Before we begin, let me call on Bill Dickinson for a few words.

STATEMENT OF HON. WILLIAM L. DICKINSON, A REPRESENTATIVE FROM ALABAMA, RANKING MINORITY MEMBER, HOUSE ARMED SERVICES COMMITTEE

Mr. DICKINSON. Thank you, Mr. Chairman. I think this series of hearings that we are conducting on lessons learned, or lessons to be learned, is very helpful and beneficial, and perhaps we should have done more of this in the past.

I would like to welcome our panelists here today. We do look forward to what they say.

A quotation from a military analyst and theorist of a former era, a quote which begins, "A recent congressional research report," says, "Armies are more often ruined by dogmas springing from their former successes than by the skill of their opponents." This was Major General Fuller in November 1914. I think it is applicable today.

Taking to heart Major General Fuller's advice means that we should be skeptical of all claims that Desert Storm proved anything permanently, and that we all should take the time and effort to challenge in detail any such claims. I think that is the thrust of what we are doing here today.

In short, no defense budget ought to be shaped solely on the gross generalizations of any great general or politician or analyst. I think it is fit and proper that we examine the effectiveness of weapons used, how they were employed, whether the profits in the past have been right when they were pointing to the shortcomings, or whether others were saying this is the way to go. In sum, that is what this panel is trying to do, to determine what did we do right and what did we do wrong, and should we change anything in our way of doing business as we address this year's budget.

Thank you for your presence here, and thank you, Mr. Chairman. I yield back.

PREPARED STATEMENT OF HON. WILLIAM L. DICKINSON

Thank you, Mr. Chairman.

Each of the panel members, in his own way, shaped the forces, the doctrine and the debate about our military structure that fought so successfully during Desert Storm.

We are about to ask them again to provide insight into what might actually be learned, what changes might be necessary in light of Desert Storm. As we listen to them, I ask my colleagues to keep in mind a quotation from a splendid military analyst and theorist of a former era. The quote, which begins a recent Congressional Research Service report about the implications of Desert Storm, says:

"Armies are more often ruined by dogmas springing from their former successes than by the skill of their opponents."

MAJ. GEN. J.F.C. FULLER, *November 1914.*

Taken to heart, Fuller's advice means that we should be skeptical of all claims that Desert Storm proved anything permanently, and that we ought to take the time and effort to challenge in detail any such claims. In short, no defense budget ought to be shaped solely on the gross generalizations of any general, politician or analyst.

I do not mean to undercut anything that our witnesses today might say, but it is only through a cold analysis of all the facts that we will learn the true and accurate implications of our recent victory in the desert.

I would guess that our distinguished panelists share my concerns, and I am equally sure that my cautions have not intimidated any of them. As always, I look forward to your frank and candid opinions. You all have never shied away from a lively defense debate.

Mr. CHAIRMAN. Thank you, Mr. Dickinson. Gentlemen, the floor is yours. I think we will just take opening statements and let you say whatever you would like. I would also ask unanimous consent that any material that you want to be put in the record will be put in the record.

Why don't we begin with Colonel Boyd, go to Senator Hart, John Lehman and Don Hicks.

Colonel Boyd, the floor is yours, sir.

Colonel BOYD. Thank you, Mr. Chairman.

STATEMENT OF COL. JOHN BOYD, USAF, RET., FORMER CHIEF, DEVELOPMENT PLANS AND ANALYSIS, DEPARTMENT OF THE AIR FORCE

Colonel BOYD. I want to thank you, Chairman Aspin and colleagues, for inviting me to testify about a reform perspective in the Gulf War.

Naturally, I cannot speak explicitly for the other reformers. We are not a monolith, but have different views that fit into a common theme. In this sense, what I have to say are my own views, but connected to that theme.

In this context, I would like to point out the features that make up the theme by returning to a presentation for the Congress on reforming the military that was drafted some 9 or 10 years ago. Although some aspects of this presentation are outdated, certain key features are not, and are still being used as a basis for describing what it takes for creating a winning military.

First of all, from a reform perspective, if we ask what does it take to win wars, reformers believe that there are three basic elements, and in order of importance they are: People. Why? Because wars are fought by people, not weapons. They use weapons. Strategy and tactics, because wars fought without innovative ideas become bloodbaths, winnable or not. Hardware, because weapons

that do not work or cannot be bought in adequate quantity will bring down even the best people and best ideas.

In looking at these three elements, we must keep in mind that the most important element in winning is to have military people that are better than the enemy. How is this accomplished? By three things. By attracting and promoting people who have the character, skill, and initiative to succeed in combat. Next, training. To hone combat skills, and also to build tactical imagination and initiative. I might add, that was critical in the Gulf War. Also, building a personal bond or unit cohesion, since cohesion keeps units from crumbling under combat stress.

Next, our military needs to be trained in innovative tactics and strategies that will lead to quick, decisive victories at minimum cost in American lives. This requires first, and this is crucial, an understanding of conflict. Conflict can be viewed as repeated cycles of observing, orienting, deciding, and acting by both sides, and also, I might add, at all levels. The adversary that can move through these cycles faster gains an inestimable advantage by disrupting his enemy's ability to respond effectively.

These create continuous and unpredictable change. Therefore, our tactics and strategy need to be based on the idea of adapting to and shaping this change faster than the enemy. Why? Because the confusion and disorder so generated permits us to win quickly at minimum cost in American lives.

Finally, in terms of hardware, what counts is having a lot of it and making sure it works effectively in combat. More specifically, the hardware numbers that count are the weapons available to engage the enemy. Weapons in the hangars and maintenance pits are a liability, certainly not an asset.

New hardware needs to be evaluated in terms of its effects upon our people and our tactics. Effective hardware helps our people adapt to change and permits them to act, react, and move faster than the enemy. Any hardware that makes our military slow and predictable, obviously, is unsuitable.

With all these comments in mind, the lopsided victory in the Gulf seems to suggest that the American military has come a very long way. The brilliant strategy, the fast-paced operation, and multiple thrust tactics impress everyone. Of course, we need a more detailed look here to appreciate how all this played together.

As I understand it, the military services are in the process of conducting such an examination. We will have to wait on whatever results they make available. Even so, the magnitude of success suggests we must have been attracting and promoting at least some of the right people, otherwise such strategy, operations, and tactics would not have been produced. On the other hand, as I shall point out shortly, we still have problems in this area.

As to hardware, testimony already given suggests we have some great successes, also some disappointments. But we must look more deeply into the war before drawing any clear conclusions about hardware performance.

Now, not wishing to comment further on the strategy, operations, and tactics, nor on the hardware until the previously discussed evaluations are made available, I will now focus on how well the military has responded to a couple of officers who helped

make maneuver warfare a reality that in turn made possible this impressive Gulf military victory.

Specifically, I would like to bring your attention to two key officers who have had a major impact on their respective services in the conception and practice of maneuver warfare. Before getting into this story, let me explain why it is of crucial national importance to understand the fate of these two officers who introduced the new ideas that made a quick, relatively bloodless victory in the Gulf possible.

First, we need to understand that throughout history the difference between brilliantly performing armies and mediocre ones has always rested on a small handful of combat leaders. Naturally, the military that manages to nurture and advance such a tiny handful of brilliant, innovative officers to combat command achieves great results, such as we just witnessed.

On the other hand, a military that suppresses such brilliant and unconventional young officers among them, who I might add tend to make life uncomfortable for seniors, is forced to grind out rigid, predictable battles with much blood and mountains of materiel.

Second, we need to understand there is a difference between physical courage in battle and the moral courage that is required to introduce and implement new ideas in military bureaucracies. If you have not been there, you cannot imagine the intense pressures and high career risks facing a young officer who, out of conscience, is trying to introduce unconventional new ideas. In my opinion, officers with physical courage are far more abundant than officers with the moral courage I have just described.

With these thoughts in mind, we can now return to the two officers I am about to introduce you to. First, the Army. Prior to 1982, the U.S. Army basic manual for warfighting, FM 100-5, emphasized an attrition scheme via firepower and frontal assaults against oncoming enemy thrusts. Even if such an unimaginative scheme could win, it would produce a high body count of our own soldiers. Needless to say, such a scheme does not represent an attractive proposition to the troops who are supposed to carry it out.

One of those troops, an officer named Huba Wass de Czege had the feeling such an approach just would not do. He had the tenacity and insight to dig deep into combat history and military theory, two unpopular and neglected ideas in the Army of that era. Despite resistance, he was able to form a team to rewrite 100-5, and even more amazingly, he had the courage to completely overturn the tradition-bound 1976 version of 100-5.

His 1982 version introduced an untraditional philosophy of maneuver warfare based upon an integrated effort of initiative, agility, and deep attack behind enemy lines. The Army refined and updated this manual in 1986 with no change in basic philosophy, thus showing that these new ideas had at least taken root.

Wass de Czege was also responsible for setting up the school for advanced military studies at the Army's Command and General Staff College at Fort Leavenworth, a second year course for a very few of the college's best graduates. This school was specifically set up in 1983 to introduce and eventually diffuse the concept and practice of maneuver warfare throughout the Army. Apparently, the Army was satisfied with Wass de Czege's courageous innova-

tions. Today he is a one star general, highly respected, and sought after by both superior officers and officers junior to him, and graduates of his school known as Jedi Knights, were heavily represented on General Schwarzkopf's operations planning staff.

For another officer, a Marine who became interested in the concept and practice of maneuver warfare, the story, I might add, is a bit different.

More than 3 years before Wass de Czege's innovations, Mike Wily, a Marine officer, became concerned about the way Marines viewed the concept and practices associated with war. A highly respected company commander with two Vietnam combat tours behind him, he felt the Marines needed a new approach to warfighting. By the late 1970's, his dissatisfaction brought him into contact with the newly emerging ideas associated with maneuver warfare. He recognized that these ideas offered a way out of the high casualty morass he personally experienced in Vietnam. Shortly after absorbing these ideas, he began laying out his version of maneuver warfare via articles in the Marine Corps Gazette, as well as by testing these ideas in the field and revising them based upon his own field experiences and tactical exercises.

Out of this, he produced unconventional thinking memoranda of how maneuver warfare should be conducted at the tactical level. These ideas were eventually incorporated in Bill Lind's highly regarded maneuver warfare handbook.

As his efforts became more and more visible, other officers, primarily junior officers, sought him out so they might learn these new, unconventional methods, that were not yet part of the Marine Corps way of warfighting. Unsurprisingly, a number of higher ranking officers tried to suppress his efforts by transferring him elsewhere where his ideas would have far less impact, or by placing officers above him who were unsympathetic to what he was trying to accomplish. This, I might add, was done several times.

Even so, Mike Wily's ideas did find acceptance among a few, I might add a very few, senior officers, including then Maj. Gen. Al Gray.

Eventually, after many frustrating years of trying to advance these unconventional ideas, the Marine Corps, under Commandant Gen. Al Gray, made maneuver warfare Marine Corps doctrine.

In 1989, the Marine version of maneuver warfare was officially proclaimed in their new warfighting manual, FM FM-1. Colonel Wily and his ideas had finally arrived, or had they?

For his untiring and courageous efforts, Colonel Wily has been recently informed by a Marine Board of officers that he must take an early retirement, 8 months early. This would suggest that are some, maybe even many senior Marine officers, would still like to retain the old attrition warfighting mindset, despite the use of Wily's ideas which contributed mightily to the relatively painless, extremely low casualty military victory.

This raises the question, why should we make such a fuss over one colonel? First, because if nothing is done about Colonel Wily, for at least the next 4 years young officers in the Marine Corps will be inhibited from proposing important, perhaps crucial, new ideas. Second, if nothing is done about Colonel Wily and the people who forced him out, then the Marine Corps will be left in the hands of

what I might add, I would call dinosaurs, who will undo the maneuver warfare ideas that worked so well for the Marines in the Gulf. Let's face it. It is time to stop paying only lip service to the idea that people are the most important element in warfighting.

Colonel Wily's experience caused me to think that we have not made much progress since World War II in finding and promoting brilliant, innovative, unconventional officers. In fact, my intuition would say we may even have taken a step backward in this area, and it may well go beyond just the Marine Corps.

Naturally, the military likes to treat the matter of officer selection and promotion as sacrosanct, and as purely an internal military matter. On the other hand, if we really believe that people are of a much higher priority than hardware and budgets, then it is of overwhelming importance that the Congress in some way get involved in the issue of selection and promotion of people. Why? Because no amount of money can make up for deficiencies in this area.

I am prepared to comment on the kind of hearings Congress might hold and the possible actions that might serve to improve our track record in advancing these few gifted and unconventional officers.

Thank you, Mr. Chairman.

Mr. CHAIRMAN. Thank you, Colonel Boyd.
Senator Hart.

STATEMENT OF GARY HART, FORMER SENATOR FROM COLORADO, AND FORMER MEMBER OF THE SENATE ARMED SERVICES COMMITTEE

Mr. HART. Mr. Chairman, members of the committee. It is a great pleasure to be here, and I appreciate the opportunity.

As you well know, it is often much more difficult to learn from victory than from defeat. In defeat, questions are asked about what went wrong so that those mistakes will not be made in the future. But victory seldom creates the need to inquire as to its sources. So I think these hearings take on unique importance. This is especially true when we reflect that lessons learned from a conflict are purchased not just with money, but with blood.

We have an obligation to those who died, to those who were wounded, and of course, to all who served under conditions of considerable hardship, to study the experience of combat carefully and thoroughly and honestly, and thereby maximize the chances for success in the future and minimize the number of casualties that any future conflict may bring. This is a moral obligation, but it is an obligation which is going to take a long time to fulfill. Accurate battle histories require access to records on both sides, and today, only a few weeks after the cessation of hostilities, we are still accumulating and assessing data on the performance of our own personnel and weapons, let alone the opposition side. Some reports of fantastic weapons performance already seem highly inflated, if not grossly exaggerated.

Nevertheless, Mr. Chairman, some conclusions are obvious. We won. We won with very few casualties. We won largely through

maneuver warfare, a central theme, as Colonel Boyd has said, within the military reform movement.

Based on this foundation, several lessons become apparent. First, the principles of military reform where they were adopted, have been adopted, have proved sound. Drawing on military history, military reformers have argued for two decades that for winning in combat, as Colonel Boyd has said, people are most important; ideas are second; and weapons are third. Although our weapons were clearly superior to those of the Iraqis, that was not the critical difference in the Gulf War. Our superiority in people and guiding ideas and strategy, operational art, and tactics was much greater even than our superiority in weapons.

Our superiority in people was obvious almost from the outset. For the most part, the Iraqis gave up rather than fight. When they did try to fight, they were inept. We were superior in people in every respect, in morale, esprit, training, tactics, and techniques.

We enjoyed the same superiority in ideas. The Iraqis planned only for a static, head on, massive, World War I type battle. When we did not fight the battle they expected, when we maneuvered around them and struck from the west, they were unable to adjust. They had not thought through what other options we might pursue and how they might counter. Arguably, we were so superior in people and ideas that if we had had their weapons and they ours, the outcome would have remained the same. They were unable to use effectively the weapons they had, and they would have been unable to use our weapons if they had been given them. But our people would have figured out how to use their weapons effectively.

The Gulf conflict confirms military reformers' priorities. First, people; second, ideas; and only third, weaponry.

This is an extremely important lesson, Mr. Chairman, as you well know, because here in Washington, both in Congress and in the Pentagon, too often in the past hardware has been all that counts. Hardware and money. People are placed a very distant second, and ideas such as doctrine, strategy, tactics, are given virtually no attention at all.

Second, there are specific lessons about the primacy of people to military success from this Persian Gulf experience. As reformers have argued, and as Colonel Boyd has mentioned, unit cohesion is absolutely critical. Normally our military personnel system inhibits unit cohesion by moving individual people around much too frequently.

In the Gulf, to our great benefit, our massive deployments brought that traditional personnel system to a halt. Unit cohesion had a period of anywhere from 2 to 5 months, depending on the unit, to form. That is not very long, but it was long enough under circumstances of social isolation. A small unit was everything, home and family, so the cohesion developed very rapidly. That cohesion was one of the main reasons our troops fought so well together.

As reformers have also argued, a lot of realistic, live fire training is important. After deployment, many units in the Gulf received much more live fire training than they would have usually. There was more ammunition to shoot, including expensive TOW missile

rounds. As with unit cohesion, that training was one of the reasons that our people did so well.

The real question is whether these important lessons will now lead to different peacetime policies. Less turbulent, individual rotation from unit to unit, and more realistic training financed by reductions in research, development, and procurement.

The importance of good military education is the third lesson about people. A major force behind the development of our excellent maneuver warfare campaign plan, as Colonel Boyd has mentioned, were the graduates to the Army's School of Advanced Military Studies at Fort Leavenworth. This school differs from virtually all of our other military institutions, schools and colleges, in that it focuses on developing military judgment largely through study of military history and exercises in making military decisions. By contrast, the focus still at most of our schools remains too much on rote learning of processes, procedures, and formats.

Graduates of the Advanced Military school under the direction, of course, of General Schwarzkopf, were often leaders in bringing operational art into play in the Persian Gulf. This also raises the question of whether now we will shift the focus in our other schools to the development of military judgment and operational skills. In this connection, Congressman Ike Skelton's subcommittee deserves, I think, a great deal of credit for its attention to the issues of military education.

Third, Mr. Chairman, maneuver warfare, an idea which has been at the very heart of the military reform movement from the beginning, worked in the Persian Gulf. Reformers knew it would work because it has worked throughout history. The Persian Gulf campaign plan, of course, was a classic plan of encirclement rather than frontal assault. This is the operational level of war. It represents a concept that reformers inside as well as outside the services introduced in the 1970's. It was first made part, as Colonel Boyd has said, of American military doctrine in the 1982 edition of the Army's Operations Field Manual. That manual itself represents military reform doctrine put forward by Army officers as well as civilian reformers.

In this respect, Mr. Chairman, I think this is an important point. Military reform is not, as some have argued, simply a civilian phenomenon. From the outset, many reformers have been military officers, especially in the Army and the Marine Corps. Reformers on the inside have been much more important than civilians on the outside. These uniformed reformers deserve the bulk of the credit for the reforms that we have adopted, particularly the reforms and ideas such as doctrine, tactics, and operational art that paid off so well in the Gulf.

Maneuver warfare was employed at the tactical level as well. The operations officer for the 1st Marine Division, Lt. Col. Ray Cole, is quoted as saying this, "Everything was geared toward the mind of the enemy commander and the will of his men to fight." This is classic reform theory.

Further, Colonel Cole said, "Our commander wanted speed and major force movement behind the enemy to make him quit. Going through as fast as we did made every action they took irrelevant, especially when we were behind them already. If you go where he,

the enemy, isn't, and then get behind him, his morale is beaten." That, of course, is exactly what happened.

The commander of the 1st Marine Division, Gen. Mike Myatt, used mission orders. This is also central to reform theory. He told subordinate commanders the result he wanted, and gave them maximum latitude in deciding how to accomplish the mission. Boundary or terrain objectives which worked to slow everyone down, and which are control devices typical of traditional tactics, were daringly minimized and it worked.

Much of the credit for the Marines' outstanding performance, of course, as Colonel Boyd has said, goes to their commandant, Gen. Al Gray. He, in fact, adopted maneuver warfare as doctrine for the corps, and has been personally active in seeing it implemented. Given the proven success of reform doctrine, it is in the interest of reform elements of Congress to oversee future Marine Corps leadership and ensure its continuing commitment to these basic principles.

From a military perspective, the success of maneuver is the most important lesson of the Gulf War. The use of maneuver in that conflict marks a major, even an historic turning point, in American military action. Turning away from methodical battle, focused on firepower and attrition, to focus on speed and maneuver. But this is only the beginning. This question deserves the continuing attention of this committee to encourage ongoing reforms and military thinking, education, and operational doctrine.

The Gulf theater turned out, happily, to be an instance of relatively easy success against a largely passive enemy. We simply cannot afford now to let traditionalist thinking take us back to old military ideas.

Fourth, Mr. Chairman, contrary to persistent, almost demented mischaracterization of military reform theory, the Persian Gulf War did not prove that high tech is better than low tech weaponry. At no time during my more than decade long involvement with the military reform movement has it ever been argued that technology, per se, including high technology, was an evil. The military reform movement has argued that our technological advantage should be used to produce larger numbers of simpler weapons that work in combat conditions, that technological sophistication was not an end in itself, and that the cost of super technology should not be permitted to drive down the overall numbers of weapons available.

The American people, including the defense establishment, should be cautious about drawing sweeping conclusory judgments about a philosophy of weapons procurement based on existing data from the Gulf war. At the present, we are dealing almost wholly with claims. History says that claims, even honest ones, are almost always greatly inflated. Until there is access to the records on both sides, claims that this or that weapon was x percent effective, are merely that. Claims.

Also, in part because of maneuver warfare, there was little prolonged fighting. That limits what can be learned about weapons performance over time. For example, the Bradley infantry fighting vehicle did not prove catastrophically unsurvivable as some, including myself, had feared. But on the other hand, only a handful of Bradleys were hit, and how the Bradley would survive in a conflict

where the enemy shot back and shot accurately, this war cannot tell us.

From what we know now, and that is still very limited, one weapon that does seem to have worked well was the Air Force's A-10 aircraft. Interestingly, this has been a military reform weapon from the outset. Reform thinker, Pierre Sprey, who this committee heard from recently, played a major role in the design and testing of the A-10. That airplane reflects a reform principle because it used combat history as a basis for achieving simplicity and low cost, and for weapons design and testing that is tough and thorough, and that duplicates, as much as possible, actual combat conditions.

Finally, on the issue of equipment. We must again remember the difference in people and ideas. When I was in the Senate, for example, we were told we needed the M-1 tank because the M-60 could not take out the T-72's. On that point, General Myatt, of the 1st Marine Division, said, "We defeated those T-72's with our M-60's, and only lost two tanks with no fatalities, and those were taken out by action of mines. It was just a matter of our people knowing how to use their equipment and fighting smart."

In conclusion, Mr. Chairman, for almost 20 years military reformers have argued that if the American armed forces adopted maneuver warfare as doctrine, educated officers in military judgment and operational art, developed cohesive units and gave them plenty of proper training under realistic battlefield conditions, we could win wars. In the Persian Gulf we did those things, or benefited from having done them earlier, and we won decisively.

Thank you very much.

Mr. CHAIRMAN. Senator Hart, thank you very much.

Mr. Secretary Lehman.

STATEMENT OF JOHN LEHMAN, FORMER SECRETARY OF THE NAVY

Mr. LEHMAN. Thank you, Mr. Chairman. It is a pleasure to be back again, and a pleasure to be using your microphones again, which I saw first here 20 years ago.

[Laughter.]

I must say, I totally agree with the priorities that Colonel Boyd and Senator Hart laid out and what the real issues that should be addressed and were addressed during the 1980's and debated in this room quite a bit.

First, people. The quality of people, how do we build a force in all the services and hold on to the kind of innovative and quality people from top to bottom after the experiences we went through in the 1970's. I think that certainly the experiences of the last year leave no doubt that the all volunteer force was a major success, is a major success. Ten years ago I was very much a skeptic. I did not think the all volunteer force would work. Now I am a true believer. I think it certainly validates the concept of using an all volunteer force for the long term in peace and war as the basis to build out armed forces.

The Reagan administration put a top priority on funding the increases that were really initiated by this committee and the Senate

committees before the Reagan administration, to raise pay, to raise the quality of life, to raise the training money, and certainly that paid off.

First, see that you have the right people, pay them well, hold on to them, train them well, and then see what you can do with equipment and modernization.

The second priority was, and should be, the tactics and training. The ideas, the intellectual foundation, and then how you apply them.

One of the unsung high tech accomplishments of this war really was the new generation of high tech training that characterized the last 8 or 9 years in all the military services.

High tech weapons are the third priority, the hardware you provide. Certainly, that is a necessary part of it. But if you cannot tie it together and teach these good people how to use it, then it is not going to work.

The Air Force Nellis test range, the Army's Fort Irwin, the Navy's strike warfare training range, the Marines' 29 Palms and Yuma, Arizona ranges, for the first time brought together the highest level of technology and computer hardware and software, and the funding that this committee provided to bring in the real threat radars, the real weapon systems, the real environment, the real jammers, forcing the training into a realistic regime so that every air crew, every tank crew that fought over there had been through very similar kinds of circumstances in real time, realistic training, where there was an empirical base of how they actually were performing instead of the first to the blackboard approach that characterized the pre-high tech approach to training.

Every single combat commander out there will tell you that those forces who went through Fort Irwin, 29 Palms, Strike U. and MAWTS training, found the combat actually less demanding than what they were put through. This was all made possible by high tech.

Some of the successes, well let us talk about the debates on those three issues that characterized the 1980's. There really was a debate, perhaps over-polarized at times, but that is a useful socratic method to get out what the real issues are.

There was a strong debate, and still is, about whether we should go back to a draft; whether we should go to universal service. I think the record of the military of the last 10 years gives the win to the all volunteer advocates.

A subset of that is what about the role of the reserves? There was a great debate. The more traditionalists said the reserves cannot really be expected to be combat ready and carry a peacetime load. They are necessary for total war mobilization, but cannot be available short of that.

I think Desert Storm demonstrated that all of the services had built reserve capabilities in the 1980's that were not there before, that performed brilliantly in the war. The Marine assault into Kuwait was led by a weekend warrior unit of reserves with M-60 tanks. The Army had specialists and teams from every level. There was too much publicity, I think, given to those Army units that were not given adequate training beforehand, not given access to Fort Irwin and the other ranges as the Marine units were who did

not perform well, so the traditionalists are saying see, that shows that we cannot depend too much on the reserves. I think the opposite is the correct lesson.

The second issue of tactics and training, I think that Senator Hart deserves a very large bouquet because while reformers have existed, and the debate between maneuver and positional warfare advocates goes back for 2,000 years, nevertheless, until Senator Hart took up the issue at the beginning of this decade, there were no high visibility spokesmen who could articulate and keep at the top of the political agenda the issue, and all of its subsets in all of the services, between innovative maneuver war or other terms of art that have been used like competitive strategies on the one hand, and positional attrition war on the other. Senator Hart, I think, was able to bring this into a major focus so that advocates within each of the services were able to get changes made.

The enemy of that innovation, when you have good people who come up with good ideas and can develop them in real training ranges as we have built, is bureaucracy and layering and rigid promotion practices. There, I think, the record of the 1980's is very mixed. On the one hand we have, through the various legislative moves and internal moves as a result of the lessons learned, the Long Commission and so forth, we have removed a lot of the many layers of chain of command and the parallel chains of command that obviously, prevented the application of common sense to military strategy.

But on the other hand, we have created a lot of new bureaucracy. The bureaucracy, according to the latest Congressional Research Service, the defense bureaucracy in the Washington area is now up to 130,000 bureaucrats. That is an enemy to the continued success of the new innovative thinking. I think the promotion systems have, if anything, returned to a more rigid, don't buck the system kind of criterion, and with less civilian role from Congress and the executive branch in setting promotion criteria and selection.

Mr. CHAIRMAN. Where are the 130,000? What does that number refer to?

Mr. LEHMAN. The staffs in the Washington area. I will be happy to provide that for the record.

Mr. CHAIRMAN. No. Essentially what you are talking about is military staffs?

Mr. LEHMAN. Military and civilian.

Mr. CHAIRMAN. Civilian?

Mr. LEHMAN. Yes. The defense agencies, the different commands, the service bureaucracies, the OSD bureaucracy and so forth.

Mr. CHAIRMAN. Go ahead.

Mr. LEHMAN. Compared to a reasonably run corporation, there is a grotesque, top-heavy staff bureaucracy in our military setup. That is something that I have always felt needs to be looked at.

The final debate of the 1980's was the high tech versus low tech. This took many variations, and as usual, there were kind of simplistic and extreme views advocated on both sides, or portrayed, particularly in the press. But here again, I think it is possible to make some generalizations.

The Reagan administration, against very strong critical comment in the press and many in Congress, had an unapologetic emphasis on the high end, on the high tech. Use high tech to compensate for the superiority and numbers that other nations will have. No, it is not the right role for us to build MIG-21s instead of F-15s and F-14s. We should pay the extra to have higher tech weapons, to be able to compensate for the lack of numbers. Certainly, we need low tech weapons as well. As a strong advocate of battleships and sea-lift ships, I have certainly not been loathe to support low tech. You need a mix.

But the fact is, high tech, the emphasis on high tech, to use high tech to make all of these new innovative strategies of maneuver work, was validated by Desert Storm. The weapons systems worked. The very expensive and very high tech training ranges produced the right strategies and tactics that worked, and made our deterrent usable, and makes it more usable in deterring in the future, because we have demonstrated that by using very high tech command and control, very high tech training, high tech precision weapons, high capability weapon systems, we can defeat huge armies of totalitarian regimes that have no compunction about providing cannon fodder. We cannot take attrition, we cannot fight wars of attrition. We can compensate by using maneuver strategy, enlightened people, and high tech to continue an affordable military in the future.

One dimension of high tech before I close, that I think has, again, gone under-commented, is the night. We owned the night. It was the ability to attack at night when all of the rest of the world's defenses are at 10 percent of what they are in daytime, that gave us this huge, immediate impact and edge. Using the high tech F-111, using the high tech A-6, using the high tech Tornados, the high tech Tomahawks, the high tech night vision gear that doubled the price of the M-1 tank compared to its predecessor, the high tech Apache. Yes, they are very expensive. Yes, you can buy five MIG-21s for every F-15E. But that gives you the night edge which is all important, and that is a high tech edge. So we need to continue that in the future.

The three lessons I would highlight that I think the administration is going in the wrong direction are: First, in the reserves, the administration's budget, as I read in the papers, is reducing the reserves and reducing the dependence on it relative to the active force, which I think is a huge mistake. If we are going to keep a large enough force structure in a budget that is being reduced, more reserves should be used to cadre more active force units and keep them in being and equipment, not fewer. I think the administration is definitely going in the wrong direction.

In naval aviation, I have never seen naval aviation in such a catastrophic state of disarray. The administration, I think, has flown in the face of every lesson that should be learned from Desert Storm. They have cancelled the upgrades, they have cancelled the A-6G, they have cancelled the A-6F, they have cancelled the V-22, they have cancelled the A-12 and the F-14D, they have cancelled the F-14 Quick Strike. Instead, they are telling the Navy, buy more of the low tech day fighters, the F-18s.

Five years from now, 10 years from now, we are going to have half the naval aviation capability we have because of this Keystone Cops approach to naval aviation that the administration has taken.

The other big lesson learned that I think is being ignored by the administration is sealift. Obviously, as we withdraw from a garrison force in Europe and go to a more deployable force, we need more sealift. The Reagan administration did a lot of innovation in the beginning of this decade to break away from the traditionalist way of procuring ships, the TAKX's that brought that first force there in the first week were budgeted in 1981, if you go back to your records, for \$400 million a copy to build one a year through the traditional, bureaucratic method of building sealift ships. We still would not have them in force if we had followed that.

Instead, we threw it out and went to commercial specs and put it out to bid, competition to commercial specs, allowing ships to be converted if they fit the bill. As a result, the average ship return cost was under \$150 million and we did it on a charter basis that saved the taxpayer an enormous amount of money. That is what we need to do now.

We need more fast sealift ships of a 24 knot, low speed diesel propulsion that can carry at least two additional Army divisions. We need more prepositioning ships, and we need more break bulkers RO-ROs and container ships to do the day-to-day logistics needed to go anywhere.

Ninety-six percent of the sealift that was used was necessary to keep that Army and that Air Force operational out there. Any place we put land forces ashore, we are going to have to continue that every day, day in, day out. We need more sealift, but there is not enough money in the world to buy enough sealift the way the bureaucratic system for buying ships is set up today. I think we need a new and innovative return to commercial procurement and conversion, especially, of sealift ships so that we can learn the right lesson before it is forgotten.

Thank you, Mr. Chairman.

Mr. CHAIRMAN. Thank you, Secretary Lehman.
Secretary Hicks.

STATEMENT OF DONALD HICKS, FORMER UNDER SECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING

Mr. Hicks. Thank you, Mr. Chairman, gentlemen. It is a pleasure to be with you today. I would like to make a brief opening statement for the record, and then I would be happy to answer questions. I would like to say, Mr. Chairman, I thank you for letting me be the cleanup to such a great crew here. It is a very easy job.

I have to say, I agree with most of the things I heard. We are all for leadership, training, good reserves. It is clear that our training was incredibly important in this whole situation. I would say that General MacArthur would be quite startled to hear that maneuver warfare was invented in 1980, since I was in World War II and remember having those same kinds of discussions, and in fact being involved in some of them.

As far as the A-10 is concerned, about two-thirds of the kills made by the A-10 were made by Maverick missiles, which are not

exactly low tech. So we have to be careful as we study this thing, that we separate out what is real from the imaginary.

I can agree with all these things said, but since you have asked me to focus on the high technology aspect of this, I will have a somewhat different approach.

I believe that our success in that operation has shown that the combination of precision-guided weapons and stealthy aircraft, along with all the other high tech intelligence, reconnaissance, and strike assets, really offer a whole new approach to combat in the future. Stealth, PGM's and other high tech systems let us accomplish our strategic and tactical aims far more effectively, with higher confidence and lower cost, both in lives and dollars, than would otherwise have been possible. The success of these technologies points the way on important programmatic decisions in our acquisition for future systems.

I have reviewed the testimony offered to this panel last week on the impact of Desert Storm. I must say I strongly endorse Bill Perry's assessments that revolutionary military technologies combined with combat support systems were a force multiplier that played a crucial role in our victory.

I also agree that our higher quality of leadership, training, manpower, and C³I contributed in important ways, and I certainly do not take away from that.

It should be remembered, however, that other countries are quite capable through effort of achieving well led and trained forces, and even fielding fairly complex C³I. The one thing they cannot expect to achieve any time soon is a degree of sophistication of our high technology weapons. These weapons were the real key to our success in the Gulf.

In recent weeks, critics have begun to question, and you heard some of it this morning, the role that high technology played in the coalition victory. In testimony before this panel last week, Pierre Sprey, for example, downplayed both the role of technology and the effectiveness of specific systems. He and other critics would have us believe that our high technology would not have had as big an impact if we had been pitted against a more sophisticated or determined adversary, for instance, the North Vietnamese.

For these critics, stealth and precision weapons represented an unnecessary and unjustifiably expensive military capability. I strongly disagree with these revisionist assessments.

Those of us who have been working on stealth and smart weapons all along for years, 20 years, in my case, see the issue far differently. For us, Desert Storm confirmed what we have already learned through the development and testing of these systems, namely, that those technologies work.

So even if the quality of our adversary had been much higher, these systems would have performed well. In fact, I believe it was precisely the great performance of our high technology weaponry that deprived enemy troops of the will to fight.

In the remainder of my statement I will focus first on how high tech systems change the way we wage war. Then I will discuss the future programmatic implications of the war for these technologies.

The increased role of air power in the war, which I think we all realize was enormously important, is attributable in large measure

to stealth and PGM's. Although the F-117's flew only about 1 to 2 percent of the total aircraft sorties in the war, they damaged half of all the strategic targets. Hitting these critical functions early in the war, intensively like that, set the tone for the rest of the campaign. Stealth, sophisticated guidance and navigation systems, and PGM's allowed us to destroy targets with great precision and very high confidence. This means we used less ordnance more effectively to hit those critical targets than ever before.

These two qualities, in turn, combined to sap the morale of the Iraqi troops. We saw the ability of our forces to defeat critical assets in a very short time. Using stealth and PGM's we hit both the Baath party headquarters and Saddam's palace, extremely heavily defended areas. Our ability to hit those targets with such accuracy sent a clear political signal to the Iraqi leadership that we could attack them with impunity.

On the operational level, the combination of stealth and PGM's tremendously simplified the process of planning and executing the air campaign. I have talked to people involved at that place where the planning was going on. They made it possible to attack highly defended military functions with high confidence. Many of these key strategic targets were in the Baghdad area. They included leadership, command and control, intelligence, communication nodes, airfields, and others.

The confidence that the F-117 and Tomahawk could address all targets of concern in priority order simplified the pre-war planning phases, as well as the restrike planning. Using stealth and PGM's allowed us to achieve near simultaneous shock to the enemy's whole military nervous system, and to deny a gradual recovery.

In the past, and this is where a major change in our air tactics was, we have had to roll back defenses and attack successive geographic areas of enemy territory. With stealth and PGM's we planned and executed attacks against entire political/military functions over all of Iraq and Kuwait, almost simultaneously.

Using stealth and PGM's meant we had to worry far less about confirming bomb damage after the strike. We knew that stealthy aircraft could penetrate the target with a very low likelihood of attrition. Previously, we had to plan for attrition of aircraft carrying weapons to target and compensate for it. Damage to targets could not be guaranteed. We had to plan followup strikes and put additional aircraft at risk to ensure that we could inflict the necessary damage. With stealth, the arrival and hit probabilities for a given target were nearly perfect.

Stealth and PGMs helped minimize U.S. casualties, despite what you heard last week. With stealth, few or no support aircraft were required to conduct strike missions, putting fewer U.S. personnel at risk. Those personnel actually conducting the strike missions were at far less risk because their aircraft were untrackable by enemy radar guided air defenses.

PGMs let us bomb from higher altitudes above the AAA level, while still retaining high accuracy. This helped us accomplish our war aims with far lower loss rates.

Stealth and PGMs allowed us to minimize civilian casualties. The imperatives of war dictated that we hit key targets in heavily populated areas. Thanks to stealth, we did it far more accurately,

and with far fewer civilian casualties than would otherwise have been possible. The F-117s could operate undisturbed at altitudes above AAA defenses, allowing them to approach their targets on attack headings which helped reduce collateral civilian damage from their weapons.

The Gulf War showed that stealth technology was a bargain. According to Brig. Gen. Buster Glosson, who was in charge of putting together the daily air tasking order, "The cost of a strike package with conventional aircraft and all their support would be at least ten times the cost of using stealthy aircraft against heavily defended targets." In congressional testimony, Air Force Secretary Rice has also shown how stealthy aircraft significantly cut operational costs by reducing support requirements.

I would like to second Secretary Lehman and say there were a couple of other technologies that were greatly important in our victory. First, night vision was critical to our forces. LANTIRN and FLIR let us operate at night, removing the ability of the enemy to reposition forces unmolested under cover of darkness. Night vision capability allowed the Apache helicopter to attack Iraqi early warning radars in the campaign's earliest phase. Night vision capabilities on our tanks let us target and destroy Iraqi tanks before they knew we were even in the area.

Another area where revolutionary technology gave us the edge was in intelligence and reconnaissance. While the Iraqis were blind to our movements, we had comprehensive knowledge of their movements, thanks to JSTARS, unmanned vehicles, and various other intelligence assets.

The great performance of high technology systems has some important programmatic implications. The Gulf War offered a glimpse of what is possible when we have weapons which hit their targets most of the time. Combining that with stealth gives us a synergy that assures us of effective capability in both the near and far terms.

Buying PGMs now allows us to get maximum mileage from our existing assets in the near term. We have seen that aircraft using PGMs performed basically as intended. The F-117 was a star in terms of the percentage of targets hit and damaged. F-111s, Tornados, the Navy A-6s were also highly successful in using laser-guided munitions.

Our F-16s were, by and large, not equipped with PGMs and their performance really suffered as a result. These aircraft are smart, in the sense that they have superior guidance and control to drop dumb bombs with great accuracy. Unfortunately, they can only achieve this accuracy at fairly low altitudes in benign threat environments. Because of all the Iraqi AAA, the F-16s could not go low enough to deliver dumb ordnance as they were originally intended.

I might add that those F-16 that had LANTIRN pods, performed extremely well.

It is very important to note that the F-117's success in Desert Storm depended on some critical factors. One, we had sufficient time both to get the F-117 force in place and to plan for its use. Two, the Iraqi's air defenses were highly centralized and vulnerable to shutdown. In future contingencies, we may have to respond in only days, and we may face far more robust air defenses. In such

contingencies a long range bomber would offer the only means for shutting down an enemy's air power and defenses early in the contingency so that the required buildup of friendly forces in the area could be accomplished at low risk. To avoid unacceptable attrition, this first phase strike would have to be done with stealthy aircraft.

I believe the quantum leap in capability offered by long range, stealthy strike aircraft, could yield a powerful conventional deterrent to aggression in distant areas. A long range stealthy strike capability would have allowed us to go in during the early phases of the Iraqi aggression and hit a few critical targets. This might, although knowing Saddam Hussein I doubt it, have deterred further aggression. With a rational leader, it very well could have.

Stealth also provides tremendous advantages in air-to-air combat and naval strike missions. It is very important, in my mind, that the Navy's AX program maintain the stealthy specifications of the A-12 or better, and I hear disquieting words about a compromise in that situation.

In the coming years we have options to develop, deploy, and maintain a combination of air forces with various mixes of platforms and munitions. The proliferation of sophisticated air defenses around the world means we will likely require some fairly sophisticated ordnance and delivery systems to be militarily effective and to keep loss rates at a low level. A mix of stealthy aircraft of various ranges and payloads should be part of the total package.

In summary, Mr. Chairman, I believe the combination of stealth and precision munitions and much of the other sophisticated military equipment we deployed to the Gulf proved its worth and has wrought a fundamental change in the way the military does business at all levels. In a time when we need to get maximum value for scarce resources, we should continue that trend.

Mr. Chairman, that concludes my prepared remarks. I will be glad to take questions.

PREPARED STATEMENT OF DONALD A. HICKS

THEME AND OVERVIEW

Thank you, Mr. Chairman. It's a pleasure to be with you today. I would like to make a brief opening statement, and then I'd be happy to answer your questions.

You've asked me to focus on the role of high technology in Desert Storm. Our success in that operation has shown that the combination of precision-guided weapons and stealthy aircraft, along with other high-tech intelligence, reconnaissance, and strike assets, offers a whole new approach to combat for the future. Stealth, PGMs, and other high-tech systems let us accomplish our strategic and tactical aims far more effectively, with higher confidence and lower cost -- both in lives and dollars -- than would otherwise have been possible. And the success of these technologies points the way on important programmatic decisions in our acquisition of future systems.

I have reviewed the testimony offered to this panel last week on the impact of Desert Storm. I strongly endorse Bill Perry's assessment that revolutionary military technologies, combined with combat support systems, were a force multiplier that played a crucial role in our victory. I also agree that our higher quality of leadership, training, manpower, and C3I contributed in important ways. It should be remembered, though, that other countries are quite capable of achieving well-led and trained forces, and even fielding some fairly complex C3I. The one thing they can't expect to achieve anytime soon is the degree of sophistication of our high-technology weapons. These weapons were the real key to our success in the Gulf.

In recent weeks critics have begun to question the role high technology played in the coalition victory. In testimony before this panel last week, Pierre Sprey, for example, downplayed both the role of technology and the effectiveness of specific systems. He and other critics would have us believe that our high technology wouldn't have had as big an impact if we'd been pitted against a more sophisticated, or more determined adversary, for instance, the North Vietnamese. For these critics, stealth and precision munitions represent an unnecessary and unjustifiably expensive military capability.

I strongly disagree with this revisionist assessment. Those of us who have been working on stealth and smart weapons all along see the issue far differently. For us, Desert Storm has confirmed what we've already learned through the development and testing of these systems -- namely, that these technologies work. So, even if the quality of our adversary had been much higher, these systems would have performed well. In fact, I believe that it was precisely the great performance of our high tech weaponry which deprived enemy troops of the will to fight.

In the remainder of my statement, I'll focus first on how high-tech systems changed the way we wage war. Then, I'll discuss the future programmatic implications of the war for these technologies.

OPERATIONAL IMPACT OF STEALTH, PGMs AND OTHER ADVANCED SYSTEMS

The increased role of air power in the war is attributable in large measure to stealth and PGMs. Although F-117s flew only about one to two percent of the total aircraft sorties in the war, they damaged about half of all fixed strategic targets. Hitting these critical functions early in the war set the tone for the rest of the campaign.

Stealth, sophisticated guidance and navigation systems, and PGMs allowed us to destroy targets with great precision and very high confidence. This means that we used less ordnance more effectively to hit those critical targets than ever before. These two qualities in turn combined to sap the morale of the Iraqi troops, who saw the ability of our forces to defeat critical assets in a very short time.

Using stealth and PGMs, we hit both the Baath Party headquarters and Saddam's palace in extremely heavily defended areas. Our ability to hit these targets with such accuracy sent a clear political signal to the Iraqi leadership that we could attack them with impunity.

On an operational level, the combination of stealth and PGMs tremendously simplified the process of planning and executing the air campaign.

They made it possible to attack highly defended military functions with high confidence. Many of these key strategic targets were in the Baghdad area. They included leadership, command and control, intelligence, communication nodes, airfields, and others. The confidence that the F-117 and Tomahawk could address all targets of concern in the priority order desired simplified the pre-war planning phases, as well as the restrike planning.

Using stealth and PGMs allowed us to achieve near simultaneous "shock" to the enemy's whole military nervous system and to deny gradual recovery. In the past, we had to "roll back" defenses and attack successive geographic areas of enemy territory. With stealth and PGMs, we planned and executed attacks against entire politico-military functions all over Iraq and Kuwait almost simultaneously.

Targeting the enemy's entire nervous system had a particular impact on our ability to move forces on the ground undetected. We've all heard about the "Hail Mary" maneuver, which began well before the actual ground war: over a period of weeks, General Schwarzkopf moved a large component of the coalition force out west of the Kuwait-Iraq border so that they could strike around and behind Iraqi forces when the ground war began. What we need to realize is that we could never have accomplished this impressive logistical feat without having blinded the Iraqi forces to what we were doing. We did that by keeping their reconnaissance aircraft out of the skies. We accomplished that aim by winning air superiority right at the start, and our stealth aircraft in turn were critical in achieving this early goal.

Using stealth with PGMs meant we had to worry far less about confirming bomb damage after the strike. We knew that stealthy aircraft would penetrate to the target with very low likelihood of attrition. Previously, we had to plan for attrition of aircraft carrying weapons to targets, and compensate for it. Damage to targets could not be guaranteed. We had to plan follow-up strikes and put additional aircraft at risk to assure we had inflicted damage. With stealth, the arrival and hit probabilities for a given target were nearly perfect.

ADDED BENEFITS OF STEALTH AND PGMs

Stealth and PGMs helped minimize U.S. casualties. With stealth, few or no support aircraft were required to conduct strike missions, putting fewer U.S. personnel at risk. And those personnel actually conducting the strike missions were at far less risk because their aircraft were untrackable by enemy radar-guided air defenses.

PGMs let us bomb from higher altitudes -- above the AAA level -- while still retaining high accuracy. This helped us accomplish our war aims with far lower loss rates.

Stealth and PGMs allowed us to minimize civilian casualties. The imperatives of war dictated that we hit key targets in heavily populated areas. Thanks to stealth we did it far more accurately and with far fewer civilian casualties than would otherwise have been possible. F-117s could operate undisturbed at altitudes above AAA defenses allowing them to approach their targets on attack

headings which helped reduce collateral civilian damage from their weapons.

The Gulf War showed stealth technology to be a real bargain. According to Brigadier General Buster Glosson, who was in charge of putting together the daily air tasking order, the cost of a strike package with conventional aircraft and all their support would be at least ten times the cost of using stealthy aircraft against heavily defended targets. In Congressional testimony, Air Force Secretary Rice has also showed how stealth aircraft significantly cut operational costs by reducing support requirements.

OTHER TECHNOLOGIES

I'd like to mention a couple of other achievements in technology which greatly aided in our victory. First, night vision was critical for our forces. LANTIRN and FLIRs let us operate at night, removing the ability of the enemy to reposition forces unmolested under cover of darkness. Night vision capability allowed the Apache helicopter to attack Iraqi early warning radars in the campaign's earliest phase. Night vision capabilities on our tanks let us target and destroy Iraqi tanks before they knew we were even in the area. Another area where revolutionary technology gave us the edge was in intelligence and reconnaissance. While the Iraqis were blind to our movements, we had comprehensive knowledge of their movements thanks to JSTARS, UAVs, and various other intelligence assets.

PROGRAMMATIC IMPLICATIONS

The great performance of high-technology systems has some important programmatic implications. The Gulf War offered a glimpse of what's possible when we have weapons which hit their targets most of the time. Combining that with stealth gives us a synergy that assures us effective capability in both the near and far terms.

Buying PGMs now allows us to get maximum leverage from our existing assets in the near term. We've seen that aircraft using PGMs performed basically as intended. F-117 was the star in terms of the percentage of targets hit and damaged. F-111s, Tornados, and Navy A-6s were also highly successful in using laser-guided munitions. Our F-16s were by and large not equipped with PGMs, and their performance really suffered as a result. These aircraft are "smart" in the sense that they have the superior guidance and control to drop dumb bombs with great accuracy. Unfortunately, they can only achieve this accuracy at fairly low altitudes in benign threat environments. Because of all the Iraqi AAA, the F-16s couldn't go low to deliver dumb ordnance as intended.

It is very important to note that the F-117's success in Desert Storm depended on some critical factors: 1) we had sufficient time, both to get the F-117 force in place and to plan for its use, and 2) Iraq's air defenses were highly centralized and vulnerable to shut-down. In future contingencies, we may have to respond in only days, and we may face far more robust air defenses. In such contingencies, a long-range bomber would offer the only means for shutting down an enemy's air power and defenses early in a contingency so that the required build-up of friendly forces in the area could be accomplished at low risk. To avoid unacceptable attrition, this first strike phase would have to be done with stealthy aircraft.

I believe the quantum leap in capability offered by long-range, stealthy strike aircraft could yield a powerful conventional deterrent to aggression in distant areas. A long-range stealthy strike capability would have allowed us to go in during the early stages of Iraqi aggression and hit a few critical targets. This might have deterred further aggression.

Stealth also provides tremendous advantages in air-to-air combat and naval strike missions. It is very important that the Navy's A-X program maintains the stealthy specifications of the A-12 or better.

In the coming years, we have options to develop, deploy, and maintain a combination of air forces with various mixes of platforms and munitions. The proliferation of sophisticated air defenses around the world means we'll likely require some fairly sophisticated ordnance and delivery systems to be militarily effective and keep loss rates at a low level. A mix of stealthy aircraft of various ranges and payloads should be part of the total package.

In summary, Mr. Chairman, I believe the combination of stealth and precision munitions and much of the other sophisticated military equipment we deployed to the Gulf proved its worth and has wrought a fundamental change in the way the military does business at all levels. In a time when we need to get maximum value for scarce resources, we should continue that trend.

Mr. Chairman, that concludes my prepared remarks. I'd be happy to take your questions.

Mr. CHAIRMAN. Thank you very much, Don, and thank all of you. Let me ask, first of all, if anybody would like to have some comments on anything they have heard from some of the other witnesses before we go to general questions. Would anybody like to comment on anything further?

Colonel Boyd. I would like to make one comment. Many of you people probably saw the interview of General Schwarzkopf by David Frost. It was an interesting interview, and he made one comment which seemed to disagree with what Dr. Hicks had to say, that if you switched the equipment, what would the result have been. He said there would have been no difference.

I, myself, have been deeply involved in designing, conceptually as well as functionally, high tech hardware in the past, and I do not think you want to push down with these people and the ideas relative to strategy and tactics and how well they get you there.

The reformers have been criticized in the past, that they were against high tech. That is not true. In some cases we will go for it, in some cases we will not. I noticed in Dr. Hicks's testimony when he was elaborating the A-117, and you will notice I call it the A-117. The Air Force still has not figured out it is not a fighter, it is an attack airplane. Maybe you people over here can get the right designator in it. But the Air Force somehow cannot get the damn right designator in there, so maybe we can do something about that. That is low tech, that designator.

In any case, the point I do want to make, Dr. Hicks did leave out the superlative performance of the A-10. Some of you people are aware, and probably many of you people are aware of the fact that in terms of the A-10, Lieutenant General Horner made the comment that it really saved his rear end in that campaign. That was not exactly a high tech piece of equipment. Also, they were flying at night, they were also flying not just close support missions, they were doing every mission aside from the close support for which it was designed. So you just do not want to trash low tech. You have to get a mixture of it, and you have to understand it.

If you go for high tech and only high tech, you are not going to have much, I will tell you that right now. This stuff really costs, so you really want to look at it very critically, determine where you need it, where the payoffs are, and go for it. When you do not need it, stay away from it because you are not going to have much. All you have to do is work over in that five-sided building year after year and find out how they come in with one price, and then you pay another price, and then you people over here have to scratch your heads trying to figure out how we can put all this together.

So the reformers have never been against high tech. We have been for it.

Let me give you a good example of what happened. I want to give you one good example in my particular career where this took place.

When I was involved in the laying out, the design, and the trade-offs associated with the FX which became the F-15 which people liked the performance over there, at the time I came in on that thing, they had the so-called, what I called the 60,000 pound turkey. The damn thing had variable sweep wings, it had an engine in there that, I am not sure the airplane could have taken

off very well. It had about .75 thrust-to-weight ratio and as I will point out for the uninitiated, it really did not have sufficient thrust to be a good air-to-air fighter.

When we got into it and we began to see all these goodies, the bells and whistles that all the labs and all the industry wanted to lay on it, it did not make any sense. So as we pruned it on down, we got rid of the variable sweep. You will notice, we do not have very many new airplanes that are variable sweep today, and I do not want to go into that story. That was so-called high tech that failed.

Another thing they wanted in there is what I call the so-called talking inlets that you put on an airplane. These are the variable geometry inlets that allow you to go 2.5 mach three, etcetera. It turns out, they had these inlets on the airplane, and as it turns out, you can get out to mach 2 or 2.5, but immediately you are looking for a place to land because you have expended all your fuel. It does not seem to me that that is a rational decision. As a matter of fact, we tried to talk the Air Force, I did and others of my kind, tried to talk the Air Force out of putting variable ramp inlets on the F-15. I said you do not need it because they are useless. You have to maintain it, it runs the cost of the airplane up, the size, et cetera.

We lost that fight, but we won on the light weight fighter. As you will notice, no variable ramps on that airplane. I do not see anybody criticizing it because it will not go fast enough.

But these are some of the things I just point out in anecdotal fashion, that you really have to look at this very carefully. Instead of some feather merchant coming in here and trying to dazzle you with all this high tech and then you find out what happened to our armed forces?

I am not against high tech and reformers have not been against it, but use it when you need it, and if it does not pay off, you'd better not work with it too closely. We really look at a mixture of it. We are not against high tech. What we are really against is unsuitable complexity or technology that does not suit the mission.

Thank you, Mr. Chairman.

Mr. CHAIRMAN. Could you elaborate on that a little bit more, Colonel Boyd? Tell me the high tech that you are for. Give me some examples.

Colonel BOYD. Like a good high tech weapon which came out in my era I am going to bring out was the Sidewinder missile, actually produced by China Lake. It was an excellent weapon. We had some problems with it initially, but you will recall over the years it became a superb weapon.

The AIM-7, as it started out, was almost, I will not say it was a disaster but it was a very weak weapon, and they have improved it quite a bit. So we are for it if you can get the improvements. But we want it tested and tested adequately so you can get these improvements in there and understand where you are going.

Mr. CHAIRMAN. Give me a current example. In the current debate of all the weapon systems, tell me the high tech weapon system that you are for. I think this is important.

Colonel BOYD. What about the A-10? These LGBs have been excellent weapons, the new LGBs. They are a high tech weapon. Par-

ticularly, as Pierre Sprey pointed out in his testimony before you, he was not too keen on the stealth. not that he was against it, but we are finding out that people seem somehow to be able to see those airplanes, radar, different kinds of radars and that, yet he made the very key point that the LGB's on that airplane unexpectedly performed very great, so you cannot knock that. You have to go for that. But these really, in some sense, are not new high technology. We had those during Vietnam and elsewhere. We have improved them enormously. So that is a good example, the LGB's.

For example, that one or the electronics that support it vis-a-vis the A-117, I might point out, if that is an example you are looking for.

Mr. CHAIRMAN. I am looking for some examples.

Mr. LEHMAN. Another example was we decided against the high tech solution in putting a laser-guided projectile on the five inch guns of the Navy ships. That was a high tech solution that all of the techies were for, but we, in all the analysis we did, having a good, accurate, dumb \$100 a round weapon outweighed having a silver bullet. So we rejected that program.

Another good mix is the battleship where we absolutely eliminated all the opposition along the coastal corridor into Kuwait using 50-year old projectiles guided by brand new, high tech, pioneer drones. Again, the Navy's approach on the drone, as opposed to the old defense Akeela program, was the best is the enemy of the good, and we bought it off the shelf from the Israelis because it worked, and it was \$20,000 an airplane, and we crashed three-quarters of them before we found people that knew how to fly model airplanes. But now they have a high tech system off the shelf that combined with an old tech system was brilliant.

Mr. CHAIRMAN. Gary.

Mr. HART. I think Mr. Hicks's comment on the A-10 makes another point, and a very important one. That is that reformers have traditionally made a distinction between the platform and the weapons it carries. Maverick did work fine, but it did not have to be on an extremely fancy, new technology, high technology platform. So I think you cannot talk about an aircraft and all of its weaponry as a weapon. It is a platform that carries a lot of weapons. There is a difference between the munitions and the carrier of those munitions.

Two other brief points, I do not think there is a weapon system that characterizes high technology in the 1980s more than the B-1 bomber. That was the true stealth bomber in the Gulf because it literally was invisible. It just did not show up.

One has to ask, what happened to technology there? I would hope this committee and the Senate counterpart would go into the question of where was the B-1 bomber? A bomber that, as you well know, started out to be a strategic bomber, then made a bizarre transition into a tactical bomber. I remember being briefed in the 1980s by its advocates saying well, even if it does not work against Soviet air defenses, we can use it in places like in the Gulf if we ever have to go to war there. Well, we had to go to war there, and there was no B-1.

Finally, I think it is important to note, Mr. Hicks is absolutely right, General MacArthur was a maneuver genius. But again, the

question is why were there no MacArthurs between MacArthur and Schwarzkopf?

[Laughter.]

Mr. CHAIRMAN. Let me follow up on that. Others will ask the questions, I am sure, about the equipment, because I think that is important. But basically, let me ask these questions of Gary Hart and then see if the rest of you would like to comment on his answers or my questions.

Basically, Senator, the interesting part, I thought, of the military reform agenda was the areas that you touched on in your testimony having to do with the manpower. In particular, three things, I think, were important. Number one, the criticism that the system produced bureaucrats rather than warriors. Second, that we did attrition warfare rather than maneuver warfare. Third was the criticism that the system did not, because of the individual substitutions, did not promote unit cohesion, and people fight in units and fight for each other when they know them, they do not fight for strangers. I thought all of those were very telling comments at the time they were made.

I guess the question I am asking is to what extent do you think they, in light of the Desert Storm experience, which is a mixed bag here from this standpoint, to what extent do you think that agenda has been incorporated into the military and how deep does it go? In other words, how fixed is it? I noted some skepticism in your testimony and a little in Colonel Boyd's.

Mr. HART. Mr. Chairman, obviously, as now a private citizen and not having access to the ongoing processes in the defense establishment, I cannot really comment. You and your committee and its Senate counterpart would be much better able to address both the structural institutional question as it exists today, and what may happen in the future.

As you note in my statement, I urged this committee in several places to maintain vigilance, to try to institutionalize the things that did work: unit cohesion, the type of education of the officers, the type of operational art and so on. I would think here Congress can play a unique role.

We have, and I in my case 12 years, we have all spent so much time on these questions of weaponry and questions of budget. What do you suppose, 90 percent of your time, of this committee's time on weapons and budget? That is why I said at the outset, these hearings are so unique. I would be hard pressed to think of a time in my 12 years on the Senate committee where we had this kind of hearing. It was very frustrating. You could not even have a committee hearing because all anybody wanted to talk about were the bells and the whistles and the radars and the night visions and the this and the that. It is people that win wars.

I know we spent our time on the questions, as John said, and appropriately so, of pay, compensation, health care, housing. It is all absolutely critical. But you have to have a military system that permits the MacArthurs to rise, the Al Grays to rise. Not only permits them, but encourages and rewards them. If the institutions themselves will not do it, the military institutions themselves, then this committee and its congressional counterparts must do that, must insist on it.

I do not know General Gray's successor. I would hope he would follow in General Gray's footsteps, but this committee can help assure that, I think.

Mr. CHAIRMAN. Part of the explanation, of course, is that we do vote on the weapon systems. We do not vote on the training manual. We do not vote on the issue of unit cohesion. We do not vote on the doctrine that is adopted by the military in their Field Manual 105. So you are driven to what you have some input on, and all the input on the other stuff is at least one step removed.

Mr. HART. Well, we vote on the promotion of senior officers, and stamp, stamp, stamp. I do not think Members of Congress ought to get into the politics of the services, otherwise you are going to have a very horrible situation of lobbying of members for I want to be a general kind of business. I got his vote, and can I get his vote? We do not want to do that, obviously. But you can identify those officers that are fighting the system, and make sure in some ways that they are not sent off to Siberia somewhere, or on the contrary, that if they deserve promotion that somehow they get it.

Mr. LEHMAN. If I could comment on that, one of the things that you did take a very active part in was the Goldwater/Nichols reforms. I think that is a very mixed package. Some real successes, and some real wrong directions in my judgment.

I think clearing up the underbrush of all the commands and the parallel and layered chains of commands was a great success. Strengthening the CINCs and the power of the CINCs over all of the components was a great success. But you also wrote into the law that to get promoted to flag, every officer must have 4½ years of lounge lizard duty as a bureaucrat. That seems to me to go fly in the face of common sense. There is no such provision that says they have to spend 4½ years commanding a tank battalion or having any operational responsibility.

So the signal to the whole officer corps is, hey, Washington is the place you get promoted. Get to those joint billets and schools, those joint staffs, staff duty is the way to go. I think that is wrong.

The erosion of the role of civilian authority in writing the precepts for the promotion boards, that was heavily eroded by Goldwater/Nichols. There would not have been a black officer promoted until probably last year if there had not been a civilian authority driven 20 years ago into the system, and a great many other reforms. If you read history, the great generals more frequently than not, had a civilian hand and legitimate civilian authority, not in politics, but in the selection process on where they came from. So I think you ought to take another look at that. What is the proper civilian role in promotion boards from lieutenant on up to four star general?

Mr. CHAIRMAN. Let me go down each of these items and see whether you think there has been much of a change, anybody on the panel.

Take the warriors not bureaucrats. It seems that what we had in Desert Storm were warriors. Schwarzkopf looked certainly like a warrior. Horner looked like a warrior. The Marines looked like warriors. Where did they come from? Did they come out of this Leavenworth school and things? No, says Colonel Boyd. Where did they come from?

Colonel Boyd. Not really, I tried to bring that out in my testimony. If you did not have the Wass de Czege's and the Mike Wily's, these gifted people, you would not have these so-called Jedi Knights, or these maneuvers renegades as people like to call them, that were able to pull this off. That is why I am talking about this small gifted few, and I am encouraged by John Lehman's comments on this. We have to protect these people. They are your future. If you do not protect them, it is high diddle diddle right up the middle again, and we are going to be in deep yogurt, and I am not just talking about the Air Force.

Mr. SKELTON. Let me ask a question at this point. I might point out that, as Senator Hart has mentioned, that our work on the military education panel has brought us in contact with a good number of original thinkers in, frankly, all the services. It is interesting to note that Colonel Wily, who has made significant contributions to our work is now leaving, but the Army has recognized now Brigadier General Wass de Czege. How do you explain the difference, the way the Army treated one and the way the other gentleman was not, Colonel Boyd?

Colonel Boyd. I am not a Marine. I do not have the faintest idea. I was so incensed and so outraged over this, I got almost emotional. I had to calm myself down so I could even speak coherently on it. I want you to know that. I am still angry over it, and I hope I do not let it come too far out in this meeting.

Here was a gentleman, Wily, who is really an unconventional thinker. He has had very great difficulty in overcoming that so-called traditional-bound thing. He hung in there all those years. He was transferred, he had people put over him to stop the whole process. Eventually, of course, through initially Maj. Gen. Al Gray and then finally the Commandant, all this did come out. What some people do not realize, that manual that they have, that FM-1, even though a young captain wrote that, and I am very familiar with his work, that young captain was very forthright with me. I asked him, see I had seen some of his previous work and it really was not that great. I said boy, this guy got brilliant all of a sudden. I said where did you get these ideas? He came right back to me with no reservation. He named three people, and primary and foremost was Colonel Mike Wily that helped shape that manual. This is the kind of stuff that is going on.

Mr. SKELTON. Let's look on the positive side. The Army, obviously, recognized this type of person. How do you cause a service to encourage this type of—

Colonel Boyd. I probably ducked your question, and I am not trying to do that. Let me go through it a little bit deeper. One of the advantages we had with the Army, and this may seem strange and probably why they went with it, Bill Lind, myself, and others, we saw that abortion called the 1976 manual, 100-5. We went around and we trashed that horribly. Initially when we were trashing it, the 1976 version of 100-5, they are looking at me and saying how can this damn Air Force officer talk about ground warfare?

I would go up and I would read comments. I would say let me read it to you. They said it was no good. I said see, even an air officer can understand that. Even an air officer can understand that. I said this is a disaster. You may win, but you are going to have your

bodies laying all over, and the guys that are going to be left, you are going to be putting them in all kinds of psycho wards or something. I said you cannot do business that way.

So we became, literally, just a big pain in the rear all around this town, bringing it over here, in the Army, in the Marine Corps, and the Army finally got tired of hearing this. So that opened up the front where Wass de Czege who was a maverick with his system and with his guys, was able to produce such a manual.

Now we did not have that same opportunity in the Marine Corps. We did not focus or pin it on any one thing per se. I think that helps answer it, because we could actually have what I call—see, this thing we just had recently was what I called Desert Storm II. Desert Storm I was the destruction of the 1976 version of 100-5. If that had not taken place, you would not have Desert Storm II. It took these gifted people to do it, and that is why I am very encouraged by John Lehman's comments.

Mr. SISISKY. Mr. Chairman, would you yield for a moment? I do not want to get this into personalities here, but something I do not understand, Colonel Boyd. If Maj. Gen. Al Gray bought the system from the colonel, four star general Al Gray is still commandant of the Marine Corps.

Colonel BOYD. That is correct.

Mr. SISISKY. So what happened? I do not understand. One minute you are building up that General Gray the commandant now is absolutely behind this maneuver that he did, and the next—

Mr. LEHMAN. Maybe I could help, if I could answer that question for you.

The reason is because now the senior heads of the services have been admonished very severely not to take any hand in steering the precepts of the promotion boards. In fact, General Gray is well aware of what happened to his predecessor when two generals were taken off the Board by the Senate because the precept had been written to favor warfighters rather than bureaucrats. So they had his fingers smacked and those two guys were taken off the Board.

Mr. SISISKY. Knowing General Al Gray, I cannot believe he is scared of getting his fingers slapped.

Mr. LEHMAN. Well the law has been changed.

Colonel BOYD. Let me comment. I personally talked to General Gray about this, I have known him for some time, and he is very upset over it, but he felt, as John Lehman pointed out, that his hands were somewhat tied. But I do not see where your hands over here have to be tied. After all, you write the rules and regulations pertaining to the armed services, and I think exactly that is what John Lehman was getting into. I think every once in awhile you are going to have to, instead of just rubber stamping these people through, you are going to have to look in, and if there are some people like that out there, you are going to have to get in the act. If you do not, you are not going to—

Mr. SISISKY. Unfortunately, we do not do anything over here. We—

Colonel BOYD. I recognize the Senate has to confirm and all that, but somehow, you people over here on this side of the Potomac are going to have to get in the act. Particularly for these few gifted

people. John Lehman is bringing it out, Senator Hart is bringing it out, and if we do not do this, you are not going to get new 100-5s.

I might add, the original version of 100-5, as you well know, was called AirLand Battle. Now they have relooked at it, and the new one that is coming out which initially they were going to call AirLand Battle Future, they now call it AirLand Operations. That is also an improvement, because the name of the game is avoid the battle, duck the battle, take them out without going through these non-productive battles. So they are still evolving it in that context.

But going back to people, I do not think you can duck it. Without these people you do not get the ideas, you do not even get any idea of how you should employ your hardware or what hardware to purchase and what judgment you make on that.

Mr. CHAIRMAN. Let me ask, beyond the personnel then, the issue of the maneuver warfare. How heavy that has gone into, how that has developed into the psyche of the planners. It is now part of the planning documents, although I read something that Bill Lind said before the war started, that he was highly skeptical that this had soaked into the psyche, and he predicted, in fact, that the military would conduct fairly much of a war of attrition. They did not, or at least the ground war was not.

Do you see that? What is the moral of the story here? Do you think the military is now incorporating the notions of a maneuver warfare? Again, let me lay the whole question out and then get your answers. Maneuver warfare may be on the ground, but what about in the air? Was that pure attrition warfare in the air where they used the military machines to pound it, or was there maneuver warfare? How do you interpret the air war? How do you interpret what happened? Do you think that was an anomaly, or do you think that was a new chapter in American military history?

Colonel BOYD. Let me take it two ways. Your first part, you asked a couple of questions here, and I want to take the first one relative to how well this has been diffused throughout the services, applied, etcetera.

My impression goes this way, let me take the Marine Corps first. If you look at the Marine Corps, in view of the comments that I have had with junior officers and some senior officers and intermediate officers, that in some sense it really is not in the Corps. It is somewhat superficial. You are going to be hearing comments, as they start dragging information out, that many of the younger officers are on board on this, and let me tell you why. They have down there at Quantico what they call a Basic School, and this is for all lieutenants. They have to go through this basic school, and they learn these maneuver techniques because Mike Wily got together with the Basic School people, so all these officers coming out have it.

On the other hand, we are getting a disconnect. In their intermediate level, there are only a few officers that seem to have it of which Mike Wily, and there are others also in this regard that have that characteristic. At the senior level, we have some good generals that were over there, but there is a disconnect in some cases between the senior people, as you reach all the way down to the junior people. In other words, the intermediate people.

If that is the case, then you have to say well you not only have a mixed bag, but it has not been mixed very well. My comment on that is that in some sense, even though Gen. Al Gray has been totally on top of this thing and wanting to do this kind of thing, it is somewhat, I hate to use these words, but it is somewhat in a very shallow or maybe impossibility, a superficial sense. I am probably overdramatizing it, but definitely.

Now in the Army, I think it has gone much deeper. The reason why I think that is because I have been observing a lot of documents that have been written coming out of TRADOC. The boss down there, General Foss, a four star general, and his deputy for operations, a General Cervace, I believe his name is, I have been reading their documents, and they are totally consistent with all these new ideas that Wass de Czege started, and that they are evolving and carrying them even further. It is even a credit to them, they recognize that we are talking about all this maneuver warfare and we have the wrong name for our own manual, AirLand Battle. It should be called AirLand Operations, which they have done.

So in their system, particularly at the TRADOC level, you are beginning to see that these ideas are really diffusing in a very broad sense throughout the U.S. Army, and likewise at Leavenworth.

Now comments that I have heard, I am certainly not familiar with it, when we go up to the War College level, particularly Carlisle, you have a different breed of cat there. They have not quite come on board on these things.

Now with respect to the Air Force, getting back to your point on the Air Force. If you go back, go back to World War II, they had what they called AWP-1, Air War Plan-1, in which they were going to bomb Germany. The idea was to hit those critical nodes and connections and win the war, but we found out it did not go quite that way. Instead, we still had to invade.

In some sense, though, what they did this time is they did have better weapons and they did try to hit the real critical nodes. I think in some cases they might have gone too far, in other words, they may have reached out too far in Baghdad, hitting areas they did not have to hit, because basically what you wanted to do was isolate the force by hitting their communications, by hitting their lines of transportation, and by hitting the vehicles trying to move to resupply, etcetera. Then if you can cut them off and use your weapons to cut them off, then, of course, you start destroying morale.

Whether you have to beat up a whole country, I am not so sure. Naturally, they did not do that this time, so in that context, they certainly have improved.

But think of it this way. What do air forces basically do? Well, they have surveillance, they have reach and they have intelligence, that is one function.

Another function is they use their mobility. Basically, they can only deliver firepower, and that is the second one.

Third is the airlift, if you look at those three functions.

So in a sense, the Air Force, by the nature of the beast, is confined to not only doing those things, but it puts them in what you might say is a firepower role. But that does not mean that that

firepower role should not be integrated with land operations. In this particular case, they tried to do it. So I think there has been some progress in that regard. So it is hard to say you cannot just get up there and step out and try to occupy something, step out of an airplane. So in that sense it was done very well, and it did prepare the ground for the land operation.

I think the Air Force has gone too far, I might add, in trying to say they were the decisive force. They were not decisive. They certainly prepared the decisive blow, which the ground operations did, and had a very important role.

So you have to ask yourself what should and what do air forces provide. When you look at all those functions, the most important thing they can provide is air superiority, and better yet, air supremacy. Once you have that, what do you really have? What you really have is you improve your freedom of action to do what you want to do. You destroy your adversary's freedom of action so he cannot do what he wants to do, whether it is in the air or the ground campaign. So once you achieve improved freedom of action and you start inhibiting his freedom of action, what basically happens then? You can play the game the way you want. He is constrained.

Remember what Schwarzkopf said, and this is very important, remember he kept all of his forces there at one position right opposite Kuwait. He did not move them out to the west initially because that was the image he was trying to give the Iraqis. Then once the air campaign started, then he started shifting his forces and logistics to the left, so he was going to have his main effort of Schwerpunkt, or main focus, come out of the west there with a hook to the east.

Somebody asked him a question and he said well obviously, even though you may be able to hide it somewhat with the air campaign, there are going to be some land forces there and some spies and that kind of thing that may still see what you are trying to do out in the west. He said that's right, however, what can they do about it now? If they try to move to try to block us, in the meantime with the air campaign they cannot move because we have constrained their freedom of maneuver or their freedom of action. So therefore, you can make that deep cut into the west, the hook to the east, and the idea being to circle the forces. But what is that, once again? Freedom of action.

So you always have to ask yourself, can the air forces, will the air forces provide that freedom of action and constrain your adversaries' freedom of action because if we can improve ours and constrain his, then we can shape and cope with circumstances, and we deny our adversary the opportunity to do the same thing. That is what happened in the Gulf.

Mr. DICKINSON. I have to leave in just a minute, let me ask a question. I want to go back to what was said before, because I did not know we were going to move on to another subject. That is the sensitivity of the Congress getting itself involved into promotions.

I cannot imagine a more sensitive and potentially disastrous situation if we in the Congress, the House and Senate, get into the passover and forcing of early outs, and whether or not he is going to be promoted. I have been at this business over 20 years too, and

I know it is not perfect, and sometimes we can go back in and review records and correct records if there has been a reason for a passover, but John Lehman, you have been on both sides of this, and Senator Hart, you have been on the Senate side where you have the approval of promotions when you get in the flag rank. How would you propose that Congress get itself involved in the passovers and the promotions in a daily basis and focus in on one officer and say hey, we like this guy because he is a maverick and we think he is being penalized, so we, the Congress, are going to buy legislation to pick him up and pass him up?

Let me ask you, Senator, and then I will come back to you, Colonel Boyd, and John, anybody pitch in. I know you all have feelings about it.

Mr. HART. Congressman, you are absolutely right. I do not think the Congress ought to get into the military promotion business.

I think in the Senate's case, the very fact that it has the authority that it has suggests that it should not just routinely exercise that authority, rubber stamp, rubber stamp, rubber stamp. It is not doing its job if it does that. Why have the authority if that is all you are going to do is just send them on their way?

It is, it seems to me, very legitimate to ask senior commanders or promotion boards why, in individual cases, why somebody has been passed over. It is part of oversight to inquire.

Mr. DICKINSON. I understand what you say, but knowing a little bit about how promotion boards act, they are supposed to act in the blind. Maybe they do not. But they have the records there and they go through, and there is not even supposed to be a name attached to the service record that they go on. Because you have this pyramid coming up and it is so terribly competitive that if we are going to have a senatorial staffer looking over the shoulder of the promotion board and saying hey, wait a minute now, come in and justify to the Senate why you passed over this guy, then I can see you decimating the system that we presently have, which works pretty good, but it is not infallible. We make mistakes. I don't know how you do that. Colonel Boyd, help me here.

Colonel BOYD. I agree you are going to make mistakes, but are we saying we don't have a system to rectify those mistakes? I think we have to have a system. I am not telling you to investigate every officer who gets promoted, but if you see a few of those people, I think Senator Hart made a good point. What are we going to do? People over the Senate go bang, bang, bang and stuff that stuff through? There has been precedent for that before. Other people the Senate got on board. A good example, some people may like him, some may not. Admiral Rickover. Remember, he was a captain, and I think he was almost 60 years old before they promoted him. What happened was the Senate stepped in there.

Mr. DICKINSON. Then they kept him too long.

Colonel BOYD. That's right, and I think John Lehman brought that out.

But the point is, it can be done and we have precedent. We have precedent for it. I am just trying to point out that if you see these few gifted people, I don't know, maybe somebody has to come over and talk to the Senate and say look, you better take another look

at this guy. Look what he has done, and have some proviso. Don't confirm the promotions until you get the people you want on there.

Mr. DICKINSON. We are looking at mechanics, and I am just a little puzzled how to do it. Do you have a suggestion, John?

Mr. LEHMAN. There are three roles that Congress should play in promotions. The first, under the Constitution is to lay out the criterion for the maintenance of the force, and that includes the criterion, the broad overall values that are supposed to be applied in promoting and seeing that there is a true, equitable merit system of promotions in all of the services. That is what you do through Title X and that is where it should be done. I have said earlier, I have criticized some of the things you have done, like the 4½ years of lounge lizard duty, but that is the proper role. If that is what you want, if you want everybody to have 4 years of staff duty, put it in the law, which you did.

The second role is to see that the proper executives that are appointed and are accountable to Congress have the proper authority necessary to run any organization. They have to have, the chief executives have to have authority to implement what the intent of Congress is through the precepts and overseeing the promotion system. Traditionally the way the Service Secretary—

Mr. DICKINSON. Let me interrupt and see if I understand what you are suggesting. You are suggesting, then, that the Chief of the Service, whoever he might be, if he sees an error in his perception, if he sees an unfairness being done, that he would then go to the Senate and say I wish you would look at this because I cannot get into the promotion system?

Mr. LEHMAN. No, the way the system used to work was really quite good. How it works now, I don't know. I have not followed it. But under Title X, the Service Secretary had responsibility for the precept, the directions to each promotion board. You shall value these qualities and these qualities and these qualities, and this much command time is necessary and so forth. That, traditionally, for years and years, was the way promotion boards were charged.

Then the promotion board met in secret, and then they would come out with their list and report it out to the Secretary. Time and again over history, particularly in that volatile period when Congress wanted blacks given a fair shake to create a true equal opportunity and the promotion boards were not giving the blacks a fair shake because they did not have the blocks checked, that had been written into the precepts. When boards came out and ignored the precept as they often did in the 1960s on this very issue, the Service Secretaries, in many cases, sent the precept back and said you did not hear me. They never put a name on it, and knew no names. But when the criterion was not met for the good of the services, then they were sent back until they came up with it right. Usually what happened was more were added to meet the requirements of the precept.

That is a proper role, because the Service Secretary has to come up here every day through the spring and is accountable to you for applying the intent of Congress in the law.

Congress should not ever try to get into naming people and micro-managing. But there is a—

Mr. DICKINSON. That is what I've heard suggested here.

Mr. LEHMAN. No, I think——

Mr. DICKINSON. You see an injustice, you reach out and get him.

Mr. LEHMAN. I think what he is suggesting, at least the way I would interpret it, is the third role of Congress in promotions, and that is the informal role.

Colonel BOYD. That's right.

Mr. LEHMAN. You people up there on the top row have a lot more time looking at these people, you have seen many, many young officers come all the way up, many of you know by name and by reputation, officers from the time they are lieutenants. There is a proper role for discussing with Service Secretaries and Defense Secretaries, what are you going to do with so and so, because that Service Secretary or that Secretary of Defense may have just come in from Okefenokee where he might not have the knowledge that you have. So there is an informal role gained by the tenure and experience that you all have. But it should not be a legislative role or an official role.

Mr. DICKINSON. I can see the danger in that too.

I have just one short question, and I do not want to monopolize the time.

Nobody has mentioned the OER's that go into the promotion records. This isn't a player? This shouldn't be a player? We cannot regulate that. If his efficiency reports, if he has a bad one in the back it follows him like a bad cloud.

Mr. LEHMAN. There was a major change that came from Congress 10 years ago and that was the weighting given to leadership and command time as opposed to management and staff time, mainly because of pressure that we got from the Senate committee. The OER's were rewritten to provide a higher valuation for leadership and operational tours. That has had to have been reversed because Congress changed ground and said no, joint staff time is more important. But that is the proper role. It is implemented through OER's.

Colonel BOYD. I would like to comment, I would like to take off a little bit on Mr. Lehman's comments about OER's.

Having been in the service I have had many OER's rendered on me, and I am not unhappy about what they do, because they are going to do it regardless. I have also had the opportunity to use them relative to other people. What I found, for example, in the time period I was in there, they kept changing the OER's, the percentages, the categories, whether they were going to weight it this way and weight it that way, etcetera. But when you have a position where you have to supervise other people, eventually you are going to have to pick a person that you want on your staff or you don't want somebody. In other words, you are going to get some opportunity. You don't get a free-loading on it, but you have some control over that, and of course a little bit more control with a little bit more rank.

The point that I want to make here is, on my people, the personalities, when I had to get a new person they would send up these folders, the eligible officers, and they would be so high in that. I would read them. It was garbage. Everybody walked on water. How do you pick anybody that way?

So what I would do, I had to go informally and talk to other colonels, what did these people really do? Don't tell me what you said on the OER, I know what was said in that thing. I don't even want to talk about it any more. So I hired people, some of them I didn't even interview. A guy would tell me here are his characteristics, I would trust the guy, he would say is that your guy? I would say yeah. They'd say, did you interview him? I would say I am convinced, I am taking him. I took people that way, and they did better than the people I interviewed. This is the thing you are against, what we are talking about, even though you lay precepts down like John Lehman is talking about.

Remember, there is going to be horse trading on those boards. You are not going to get rid of that. In many cases, the thing that I found out, being an officer in the Air Force, and I have seen other successful officers, even Colin Powell himself, General Colin Powell said the same thing. He said the most important things I get are through my invisible or informal channels. That same thing worked for me, particularly as I rose higher, so I could reach down and find out what was going on.

Now there is a danger when you do that, when you circumvent the command line, but that is easily dealt with. You have to use those neurons every once in awhile and you can deal with it very easily. What you do is you prescribe what I call an iron law. The iron law goes like this: any information that I get outside of the command lines or invisible loop, under no circumstances, and I mean under no circumstances, will that ever be used for disciplinary action. It is information only. I learned that as a young officer, and when I found out, darn, I found out other guys were doing the same thing, and some people that knew I was doing it were criticizing me, and the gifted people were doing that, many of those people. So it can be done, but you have to abide by that iron law. If not, you will just destroy the organization. It can be done.

So you have to get into these kinds of things. What I am saying, you had better get that iron law, and the third point that Lehman was pointing out, if we had people like the Mike Wily's and that, these things are correctable. Let's correct it.

Mr. CHAIRMAN. Gary.

Mr. HART. Mr. Chairman, on the fundamental question you asked earlier about the institutionalization of reform, I am perhaps more pessimistic than others. Just given the way human institutions work, these are almost 200-year old institutions. By their nature, they will become inevitably traditionalists. I think part of the reason why field manuals got changed and so on, were the disasters in Vietnam.

You now have senior officers who served as younger officers in Vietnam and saw what did not work.

What concerns me is when this generation of somewhat reform-minded officers moves on, will these institutions go back to the very traditionalist kind of thinking. I think unless there is congressional oversight and insistence on some of these things, they inevitably will, given human nature.

Mr. CHAIRMAN. Ike.

Mr. SKELTON. Thank you.

All this discussion about maneuver warfare and what took place in Desert Storm, my gosh, all they did was read history. They saw what should have happened at Tarawa and bombed sufficiently as was not done there. They took a lesson out of Montgomery's deception at El Alamein. Took Stonewall Jackson's flanking movement, and you have Desert Storm. That is what they are teaching now in the various war colleges, and I am pleased to say they are doing a superb job.

One of you gentlemen mentioned the SAMS course out at Fort Leavenworth. I compliment it, it is more than earning its keep.

But let's talk about high tech for a minute. Secretary Hicks, you mentioned that. You specifically mentioned the F-117. It was not confined to that, however. In talking with some of our young men that captured some of the Iraqis, some of the Iraqis wanted to know what type of rockets were used to destroy their tanks. When informed that they were not rockets, that they were M-1 artillery shells shot from the tanks, they did not believe it. That is high tech stuff, and it works.

But let's talk about the F-117, the stealth. It is a new technology. The great debate over the bomber which, of course, is the B-2, has been eliminated. The stealth works. I think you said, Mr. Secretary, that half of the targets that were damaged in the air campaign were done by the F-117.

What is the next step, in your opinion? We are here to talk about the future, what is the next step in your opinion, Secretary Hicks as to where we go with our stealth technology? Needles to say, I am a supporter of the B-2. Where do we go from here to there and beyond that?

Mr. Hicks. First of all, let me make a couple of comments that lead into that. That is that I also agree that platforms are important to consider being upgraded. If you have avionics you can put in a platform, if you have a Maverick you can put it in an A-10, if you have FLIRS or whatever, you should do that. You should not really go into new platforms unless you have something significant.

The Chairman will remember that John Foss and I testified on that subject some time ago, where we felt that stealth was the only reason, the new reason, to go into a new platform. There was a lot of discussion by Pierre Sprey last week, and almost referred to here by Colonel Boyd, questions about stealth working. In fact last week Pierre Sprey commented that we risked the lives of the F-117 pilots because stealth would not work, which of course, may qualify for the most ridiculous comment of the year, at least one of them. If you ask the 117 pilots how they felt, going in very stable at 20,000 feet and using their laser-guided triple LGBs, there was no question of that. They knew they were safe and they knew there was no problem at all.

There was a document put out last March of 1990 about the Air Force, which I think is a very, very important document that talks about stealth, talks about how good it is or bad it is, and discusses, makes it realistic. Of course it is not magic, but it has a lot of relationship to submarines and their quietness. That is a stealthy type. So the Navy, of all services, should really understand that.

I think what is terribly important is, and I think that has been totally passed over here, all my adult life the Air Force has talked

about roll back. Knocking out the air defense systems in a geographical area, getting the things down so you could use other forces. Stealth allowed us to do that across the entire situation here. We were able to knock out all of their command centers, all of their communication centers without worrying about survival. We did it.

As I said in my prepared statement, the reason that I support long range stealth, which I think is important. I also support the ATF, I support the A-12 or its new version, whatever it will be, is that that gives you an enormous advantage over the enemy, a very, very large advantage. Long range is important because there are many times that you just do not have the ability to put our assets where you want them in time. We had a luxury here. We had a luxury in that if Saddam Hussein had gone into Saudi Arabia, we would have been hard pressed. We would not have had the basis we had. He did not do that, so we had the ability to take 9 months to prepare everything.

As far as I am concerned, the ground war became a snap because of the air war before it. It was not just a war of attrition, it was a war of knocking out all the key spots that allowed him to command his troops, to see what was happening. He did not know what we were going to do, we knew what he was doing, and so on.

So I think it is important that we maintain that capability from now on. In fact, there was a very interesting article recently written by General Glenn Kent, which I have given the Chairman, which I think is a fundamentally important thing about how the next war might be fought. In this case, everything goes along, Saddam Hussein may get overthrown, whatever. But eventually, we have a situation where Saudi Arabia is invaded completely. What do we do then? What do we have as assets to handle that? I think stealth becomes one of our really important technologies. It is a technology as important as radar, and it seems to me a tragedy if we let that technology and all its implications across the board, go down because of unnecessary reasons. It is just too important.

Colonel Boyd. I would like to make one comment, to respond to Congressman Skelton.

Mr. CHAIRMAN. Please.

Colonel Boyd. You made the comment about the schools and they have come a long way, and then you mentioned history. In some sense you are right, but I would broaden it a little bit more. It is more than history that plays in there. I would have to get together with you and show you some details of things that I have worked out where you can combine many ideas of science and engineering with history, and you can evolve to a new form.

What comes out of that new form, and sometimes I do not even like the term maneuver warfare, although we have applied it in that context so I use it myself. But mostly, when you look at these schools, and I do not care whether you are talking about Leavenworth or the Marines or elsewhere, or even if they are doing it from a historical viewpoint, they are primarily looking at it from strictly a physical viewpoint. In other words, trying to get into the back door and how troops move in the field. In some sense, they are really not coming to grips in a very positive sense with the mental and moral effects you can produce. In other words, how can

you set it up ahead of time, instead of having it happen accidentally to generate these mental moral effects, where you can literally pull your adversary apart so he cannot even function as an integrated organism.

There are ways that can be done, and I would say that part has not been stressed. If you are going to talk about future warfare or future conflict, or if you are going to talk about conventional forces, unconventional forces, surrogate, whatever you want to talk about, you are going to have to get more and more into that because if you do not, your adversary is, and we could have some very serious consequences. Just studying military history is not going to get you there.

Now I am not saying you should not study military history, but we also have to evolve to a higher level, and if we do not do that, we have some very serious problems. One of the things that I have detected so far is this idea where people tend to think of maneuver warfare primarily, and in some cases exclusively, in a physical context and they really do not come to grips with these mental and moral effects that you can produce, or where you can set yourself up where you deliberately produce that.

Mr. SKELTON. Very quick like, and I know we are running out of time, very quick, in ten words or less, give me an example of what you speak.

Colonel BOYD. A very simple example was the synthesis that we were able to do with respect to airplanes, my experience with airplanes, my experience with looking at military, well I had not looked at military history yet but I evolved it later on, but my experience with airplanes, the flight tests of YF-16, YF-17, and what I noticed in the works of Kurt Gödel. Probably you folks never heard of him. He was a mathematics logician. Also the Heisenberg Principle and the second law of thermodynamics. You can synthesize those things together and know ahead of time if you do certain things in a certain way, you can literally generate confusion and disorder in an adversary system and pull him down so he does not even know what hit him. That is why people really treated that—in a superficial sense.

The key idea is not observing, orienting, deciding, and acting. People have known that. They have said it different ways in the past. The key idea is to do it in a way where you get inside your adversary's loop. Thereby, he is dealing with outdated information. Thereby, you generate these confusions and disorders. They are also the same kinds of things that can be done in the moral dimension, too. Particularly when you look at command and control. When you look at orientation in a much broader and in a much richer context than how can you pull his pants down, I mean mental pants down, and his moral pants down, so he cannot even function as an organic whole. You have to gain that, and it is very powerful stuff. You would be surprised what comes out of that.

Some of that is in the green book that I have put together. If you want to go over it, I would be glad to go over it with you, but there are some very powerful influences there.

Mr. CHAIRMAN. Congressman Sisisky.

Mr. SISISKY. Thank you, and thank you, gentlemen, for your testimony today.

I would agree with you that people is the most important ingredient. I just came back from the Persian Gulf last night, and I tell you, the service people over there are just absolutely unbelievable.

You can mix that with strategy and tactics and you seem to place a lot of emphasis on officers. I am here to tell you that the training, the absolute training that we have given our people is really the difference.

A good part of my time was spent, not on this trip, but with the Navy. I am from the Hampton Roads area. To ride on a nuclear submarine and to see 19 year old kids running computers, the training that these people have. To look inside of an M1-A1 tank, and by the way, while I am on the M1-A1 tank, somebody mentioned the M-60's, the Marines love them. I am going to dispute that with you. I specifically asked the question in the pre-positioning of Marine supplies that they are getting ready to do, are you going to pre-position M-60's? No. We are going to do M1-A1s. If you will look, what General Schwarzkopf had to do to take M1-A1s in our armored division to place them there, the Iraqis did not even know they were being shot at until they saw the tanks beside them. The M1-A1s could shoot on the run, they could see at night. That is high tech. To say that——

If we have not learned that our edge, and we do not keep the edge on high tech, then we have lost a very, very valuable thing.

Now I happen to be one that the military reform caucus never told me to defend the A-10. I defended the A-10 because I saw something in front of me that looked pretty good. But the world is changing, and what is good today may not be good 10 or 15 years from now.

I worked in the little things, such as entrenching tools, when I went to Honduras, and saw a pile of shovels in there because our handles broke. I asked specifically, how did our handles do this time? They corrected that.

Mine detection equipment, they were able to do something with mine detection with not a very high tech piece of equipment.

So yes, we can use low tech, but if we ever lose our edge in high tech, we are just as vulnerable as can be.

We sat there with 11 pilots of 11 different planes, Air Force and Navy, listening to them talk to us on what their aircraft did. It dawned on me, as this war is written about, probably the one thing that will come out with all the air sorties that they had, everything that was going from the sea, Tomahawk missiles were coming in, F-117E's, the Brits with their Tornados—They did not crash, and why? I hope you don't think that is not high tech, that thing sitting up in the sky directing all of that traffic. That is as high tech as you can get, and these people were directed by that. It is almost impossible. If you can imagine that many sorties going over Washington, DC or the State of Maryland and Virginia at the same time without anything happening.

Having said that, I have to ask something specific to Secretary Lehman. You were absolutely right about naval aviation. You were kinder than I have been. I said that naval aviation is going into Chapter 11 and I want to try to prevent it.

Mr. LEHMAN. I would say Chapter 7.

Mr. SISISKY. I have said I want to prevent it from going into Chapter 7. The problem is, and I have been very outspoken on this, what we can do about it. I do not really believe we can wait 15 years, with the A-6s in there, before we develop another plane. The argument is going to be, as you know, it was 2 or 3 years ago with the F-14D. The thing that scares me really is that the Navy has to fill the decks, and they are going to fill the decks because they can fill them cheaper with F/A-18s. I am not skilled enough to know whether that is the right thing.

Do you have any ideas? We need them pretty fast.

Mr. LEHMAN. It is funny you should ask, Mr. Sisisky.

[Laughter.]

Mr. LEHMAN. I do have some ideas. I spent a good deal of time just 10 years ago before this committee defending the F-18. There was a great effort to kill it. The F-18 is an excellent, reliable swing fighter that is the perfect airplane for the Marine Corps. Very capable in air-to-air, capable in air-to-ground, but it is too short legged for interdiction missions from a carrier. It is just not practical. It cannot carry enough and it cannot go far enough without immense amounts of tankering to get it there and back.

There is a role for it on the carrier decks, but to have the carriers play a role supporting the CINCs in every crisis of the last 40 years, you have had to have a big, capable platform that can go far without refueling and carry a heavy load. That is what the A-6 has been doing for the last 25 years. They are all old airplanes. The new administration program says put new wings on them, certainly. But the tails are now falling off. These are old airplanes.

It is incredible to me, both the F-111 and the A-6E went into service the same year in 1972, went into combat. Since that time the Air Force has wisely upgraded the 111 three times to the latest level of high tech, smart weapon technologies. Every time the Navy tried to do the same thing, and OSD tanked it, killed it, all the major A-6 upgrades.

The Air Force did a very smart thing in taking a good fighter needing more night, all weather, deep strike capability, took the basic F-15 airframe, a superb, big, long range airplane, and made it into a precision, long range all weather strike fighter, the F-15E, and it performed brilliantly in Desert Storm.

That is what the Navy ought to do now, is take their existing F-14 and do exactly what the Air Force did with the F-15, make a strike version of it. Put the A-12 radar that has already been developed, or the F-15 E radar, or modify the AWg-9 radar, but that is a big airplane that has the range and has the two-man crew and has the bulk for the avionics.

To try to make an F-18 into a silk purse is ridiculous. It would be a brand new airplane. It is going to be all new fuselage, more fuel, new engines, new tail, new wings, and is going to cost a non-recurring \$4 or \$5 billion. That makes no sense at all. The current version of the F-18 cannot do the deep strike mission, regardless of what people tell you. It cannot be done.

So you have two options for the interim. Either put the A-6Gs or Fs that have been paid for in development into production, or the F-14D strike version. Then long range, advanced development for a new airplane.

But the current proposal is the most nonsensical approach I have ever seen.

Mr. SISISKY. When you get an opinion, let me know.

[Laughter.]

Mr. SISISKY. I happen, I think, to agree with you. I am just going to say one more word.

The GAO was up here testifying a few weeks ago, talking about naval aviation. They mentioned the F/A-18 with something that kind of scares me, and I think it has a bearing on this. They said it is the cheapest way. I corrected the guy right then and there, and that is what we have to be careful of in analyzing this war. There may be a cheaper way, but it may not be the best way to protect our people and to win, because after all, that is what we are doing. I think we have to be extremely careful in that, to provide our people—

Mr. LEHMAN. It is not only not the best way, it is not the cheapest way. The Air Force looked at the same choice. They looked at trying to make the F-16 into a bigger, long range strike aircraft and they found the expense was just too high to do that. The same—

Mr. SISISKY. By the way, the F-111, I might say, when I was over there, that is all they could talk about, how well that plane performed.

But one more thing. I think we made the commitment now to have an all volunteer force. Obviously the commitment, because it worked. Don't you think there is a difference between an all volunteer force using high tech equipment, and conscription when you have somebody coming in for a year?

Mr. LEHMAN. I would go further. You cannot have a truly high tech, integrated armed force as we now have it, without the all volunteer force, without the high tech people, without the capability to draw and attract all high school graduates and people with the capability to take technical training and then keep them, and to stay in.

But there is one aspect that I have mentioned here before that worries me. You really are having a very distinct, now, separation of the career service from society. I was out in Berkeley last week, and amazed to find that they have just cut 30 percent of all ROTC billets. They virtually have no OCS in the Navy today, one class a year, and it is becoming a total career force. We are not going to have the citizen soldier/citizen sailors that we used to have in the services, and I think that is something that ought to be looked at. We need to go to a more reserve-oriented, do your 4 year, 5 year, and stay in the reserves approach.

Mr. CHAIRMAN. Let me ask the others about that. Gary, have you changed your mind about the all volunteer force and the draft and all that?

Mr. HART. No sir. I do think that Mr. Lehman has put his finger on a social or sociological point or problem, and it is a profound one. I think we ought to, there is no simple answer to this that solves all the problems and considerations. There is a strong argument to be made for people giving something to their country. There are enormous advantages if you are going to have a high technology or technology-oriented defense system, to have highly

trained people that you keep there for a career. It makes a lot of sense on one level.

Then you have this problem of democratic duty and responsibility that I think has largely fallen away in this society, and we have to figure out a way to address that. Maybe through some form of national service, voluntary national service, with a military/non-military option, a variety of things that ought to be thought about. But I do think to the degree we solve one problem we do not address or solve the other one.

Mr. CHAIRMAN. But you would not change the all volunteer force?

Mr. HART. No, but I do still strongly favor, as I always have, some national service program starting on a volunteer basis with a military/non-military option.

Mr. CHAIRMAN. Colonel Boyd.

Colonel BOYD. There is a comment you can make on that that I think might get around that. If you have an all volunteer force, of course, the feeling is that also by having military they are not as tied to society as much as if you have a draft. That has come out in the past.

But there is another way you can handle it, and it came out today. It was something actually the reformers proposed way back in either the late 1970s or early 1980s, is change your proportion of your force, and you are going to have to do it now with the money constraints, of regular versus Reserves and National Guard. So if you up the percentage of the force being related to Reserves and National Guard, and I am not talking just going to weekend meetings. In other words, they can do it positively so you do not have some of the problems you had over there in the Gulf with some of the units. Some did very well.

If you do that, then you are also keeping society sort of linked up with the armed forces. That is one way you can kind of mitigate the bad aspects of not having a draft. I am not so sure exactly where I come out on that right now, except I do think, one way I do come out on it, I do think we are going to have to have a larger percentage of Reserve, National Guard vis-a-vis the regular force, and there are some positive aspects. There are some negative ones, because sometimes we just shunt them aside and do not pay enough attention to them, and then we find out we have units that are still training rather than being in the operation, as that happened.

But on the other hand, other units performed magnificently over there, in fact they were in the leading waves and did a superb job. So it is up to us to do the right thing so that can be done. Those are sort of my views on that right now.

Mr. CHAIRMAN. I cannot let John Lehman go by, we talk about the problems of naval air. If you were redoing that whole A-12 thing over again, John, what would you do differently?

Mr. LEHMAN. I guess I would not be so optimistic about the common sense of the bureaucratic decision-making process. On the one hand the Navy and the Air Force started their new fighter programs at the same time. At the same time, 1981, they both estimated at the time that they would cost about \$3 billion non-recurring to get 10 years of fully developed program. The Navy attempted an

effort to design it to cost, to say look, we are not going to have infinite amounts of money for a new strike aircraft. We can only afford this much in expanding dollars, and went to industry and said can you build it for this, because if you cannot, we will have to do another solution.

So the result was that we brought in the just-retired Secretary of the Air Force, Hans Mark, to head a blue ribbon panel to look at the technology. Would it support a stealth aircraft with the range and payload of the A-6. Their panel said no. Wait until the Air Force finishes the B-2 and go with the A-6 upgrade. Use the basic platform you have and put the latest technology of smart weapons and digital avionics in it, and when the Air Force has paid for and proven the stealth materials and design technology, then do it. Start an advance development program.

But the OSD bureaucracy ordered the Navy, ordered me personally, in 1983, to fully fund a full FSD program for a stealth follow-on to the A-6, against the full Navy recommendation. So we agreed to do that, but we said look, in order to do it we are going to have to give up things like ICNIA, the integrated navigation and avionics system, we are going to have to give up a lot of the new bells and whistles and upgrade them later.

To do that, we said OK, we are going to freeze any design changes once this contract is approved. We worked for 6 months to try to throw things off, as Colonel Boyd was saying. We knocked off about 60 percent of the requirements that were put in.

The effort was funded at, as I recall, \$3.5 billion with a 30 percent growth margin in it. Well, the contract continued to be negotiated, was not signed until about a year after I left, so after that I do not know what happened, but I read in the newspapers that the frozen design, no changes approach, was eliminated, and new changes were brought in by OSD, which opened up the requirements again, added new requirements, and shifted the fundamental design.

Nevertheless, having said that, as I read in the papers, the program when it was cancelled was overrunning to the extent of \$1.5 billion and may have gone even to a total of \$6 billion before they got the whole airplane developed.

Then I read a couple of months later of the great success of the Air Force program that did not try to constrain the price, and is now estimated at \$13 billion, twice what the Navy program would have cost, and that is a success.

[Laughter.]

Mr. LEHMAN. I guess I was naive to think that anybody, anywhere, cared about the cost of a system. The Navy tried. They failed to get to the cost they wanted. They had maybe 100 percent overrun, but it still would have been less than half what the Air Force now has as a successful program.

So looking back, the lesson learned was I had a major hand in destroying the prospects of naval aviation by believing what Congress was telling me that they wanted the costs constrained.

Mr. SISISKY. It proves that the Navy needed a good public relations program, like I told you 8 years ago.

Mr. CHAIRMAN. It is an interesting view of the world, John. Martin Lancaster.

Mr. LANCASTER. Thank you, Mr. Chairman.

Mr. Secretary, I like Mr. Sisisky agree with you on your assessment of the situation of naval aviation, but we are in, whether or not we believe it, in constrained situations when it comes to budgets. In order to get what you think we need in naval aviation, what would you cut? What is in the Navy budget now that we could eliminate in order to do the right thing by naval aviation, given the fact that all budgets, including the Navy's, are going to come down over the next 5 years?

Mr. LEHMAN. First of all, I do not quarrel with the level of budget allocation that has been made. I am sure I would be arguing if I were in there, but I think overall that is not the problem here. Number one, you have to start with the requirement. Desert Storm was a land war because we had a situation where we had a friendly alliance and friendly host countries, we had 32 land air bases that we could spend 9 months building up, bringing the logistics over, and it was done exactly right and without quibbles. The Navy made a major contribution to it, of course, securing the sea lanes to get the stuff there, and then supporting the land war with Tomahawks and gunfire and strikes from the aircraft carriers, but it was not a naval war, so it should not be used as a template for what naval requirements are going to be in the future.

About 240 or so other crises in the last 40 years, we have had no land bases that could provide that, and we had to move quickly, in weeks or days, and the aircraft carriers and their supporting strike forces, Marine Amphibious Assault ships, and we are going to need them in the future. So we have to keep that capability.

An essential part of that is to have a deep strike interdiction, whether it is against ships that are coming at you, backfires, or striking the land. That is what the Navy is not going to have. That is what they are losing now, and they had better change to get it. They have 10 different aircraft programs going on. To me, I cannot, I have yet to hear even the beginnings of a common sense argument why we are going to continue to procure F-18s because we already have enough F-18s for 24 aircraft carriers plus the Marine Corps. So I do not know why we are going to continue to spend the money on those when we do not have any deep strike aircraft.

It seems to me that the Navy is still operating its forces on too high an op tempo. I think the only way they are going to be able to hold on to a fleet big enough and keep a training level high enough is to shift to a lower level of operational tempo and to use more reserve cadres. I think Admiral Kelso's done some very innovative things with his idea of nesting frigates and so forth. But we have about 100 frigates in the current Navy counting the reserve and active. Frigates, in the world of the future, are not going to be as necessary as other ships. We are going to have probably 50 Aegis destroyer cruisers. I think the mix needs to be looked at. We have a lot of amphibious ships now, and we can use a lot of combinations, as the Marines have been very innovative in using commercial type ships to carry lift and bring them ashore.

So there are lots of tradeoffs that can be made, but I do not think a high enough priority is being given to protecting a deep strike interdiction, a dump truck that you need to lay mines, to do night attack, and to do counter-surface warfare, the basic work-

horse, is not going to be there. You cannot take 25 year old airplanes, put new wings on them, and say that will take us into the next century.

Mr. LANCASTER. Several of you mentioned the importance of unit cohesion and training and that sort of thing. If we had not had the four or five months that we did to develop that unit cohesion in the field, to do training with live fire, if we had not had all of our supplies and materiel in place, what would have been the outcome? If Saddam Hussein had continued his drive into Saudi Arabia, and had taken those ports and those airfields that he had built, then what?

Colonel BOYD. You cannot predict what is going to happen. I agree, it was a unique campaign, we had time. We had cohesion in the outfits that went over there, but on the other hand, they also had to act as an integrated whole. They had all kinds of time to practice, like you indicated. On the other hand, we may be forced into a situation like we have had in Korea in the past, where we have to send people over there and they have to learn on the job, and therefore, you have to have the training.

If they would have gone down in Saudi Arabia further, and of course they would have had a little bit of difficulty because their logistics system was not all that great either, but nevertheless, we still could have prevailed. It would not have gone as fast. Remember, he could not have got all those ports. There are other areas where you can get in there. But you are not going to do it quickly like you did in a Desert Storm operation. But to say, not having looked at it in detail, to say what would happen in a particular time period, I am not so sure.

On the other hand, there might have been some political constraints if they did that, too. How far do we want to get committed in that? That could go either way relative to our allies and that.

Mr. HART. I think at the very least we would have found out the capabilities and limitations of the large aircraft carriers.

Mr. LANCASTER. Would we have had the unit cohesion already in place that I think did develop to a large extent because of the ability to train in the field and in an unusual setting that might not exist here and at other bases?

Mr. HICKS. Our training facilities are really marvelous, I think. John has talked about that. If you go to Fort Irwin, which you should all do, it is a marvelous place, and they have training across the board. I think we had people who were well trained to go in there ready to do it.

The problem would be where they would be based and so on. It would have been a much more difficult situation. You have to think about the role of Israel and so on, Egypt, other places we could have operated from. So I think we would have done the job but it would have been a lot more expensive and cost a lot more lives than what happened.

Mr. LANCASTER. What role did our operating in a very austere, alcohol-free, social life free environment have on the operation?

Mr. HICKS. It is a sobering thought, anyway.

Mr. HICKS. I do not think it had any impact, really. It made people on edge, probably, but I do not think anything else.

Colonel BOYD. I do think, though, that by the nature of your question, you will probably find out you are probably talking about cohesion not only at the lower levels, but the interaction with the higher levels. I think because they had time to get over there from an overall organic viewpoint, you would obviously have more unit cohesion. But that does not mean if you had to go in on a quick shoot basis that the lower level units would not have it. You might have a very difficult time, though, to have everything well integrated at the various levels.

Mr. LANCASTER. Colonel, I have gone to another question. I am not talking about time now, I am talking about the situation that existed in the field with no alcohol, a very austere environment, absolutely no social life on off hours. What role did that play? Was that only in unit cohesion or did it also make the personnel sharper in the operation of their equipment?

Mr. HICKS. You make an interesting point about aircraft availability. We all know that we have aircraft that have about 80 percent, depending on available situations. In that war, of course, as you know, we were almost 100 percent. It is like the Israelis. People were working as long as it took to work to get them back in the air. But I would say that happens in any war. When you are in war, the issues of having alcohol and places to go to dance are way back from the front.

Mr. LANCASTER. See, I thought Secretary Lehman would jump on that, because I am a Navy man, and that is the conditions under which we always deploy.

Mr. LEHMAN. I knew you were going to say it, that is why I did not say it.

Mr. LANCASTER. Thank you.

Mr. CHAIRMAN. Let me follow up the question though, because of all of the components of the military reform agenda, making warriors not bureaucrats, maneuver warfare, unit cohesion, I thought that the case is that the hardest case there has been some progress on is the unit cohesion part of it. I do think that there is some pretty good evidence that a lot of unit cohesion was built over 5 months in the desert that otherwise would not have been there, and therefore, the units fought better.

Why is it so hard? Shy Meyer, when he was Chief of Staff of the Army, made a stab at it with a notion called the cohorts, you remember that. There was some attempt to make some unit cohesion, but it was abandoned in the light of, I don't know, other kinds of personnel needs, of rotating troops and getting tickets punched and getting people moved around.

If you really wanted to do this without having 5 months in the desert before the next war, how do you do it? Is there any new thinking on how you ought to try and do this, build this into, particularly in the Army and the Marines, I guess, and the ground force units?

Mr. HART. There is no magic to it, I think you just change the personnel policy. It is a bureaucratic policy, one driven by careerist kind of considerations. Ticket punching, as you suggested. Some theory that it is better to have tried, have everybody experience 100 jobs rather than do one or two or three well. It is a philosophical, cultural, sociological phenomenon, and I think one just has to

make basic philosophical choices and say no, we are not going to do that any more. That is not important. What is important is knowing your buddy, knowing who you are fighting with, and no one that I know of is arguing a pure regimental system, but these are questions that periodically ought to be asked.

We just have this mentality in our country that this is the way it is done, this is the way we do it here, and we are not going to question it. Why not? Question it. Test it.

Colonel BOYD. Part of this comes out of some World War II experiences, you might be familiar with what I am talking about here, where when we put people in the combat replacements, we put them in as individuals, and we did not plug in units. What was done, where this issue became very manifest in the reform movement was some work done by Martin van Creveld in a book called "Fighting Power." If you have never read it, I would encourage you to read it because what he did, he looked at the German Army performance during World War II, and I am not trying to say everything the Germans did is right, but one of the things they did was they did not put people in on an individual basis. They would take units out and plug in whole new units. The result is, by doing that, rather than have some new guys in there that could not fit in with the group, they already had that unit cohesion established.

On that basis, it is very good. On the other hand, as Senator Hart pointed out, and others have pointed out here, we have personnel policies where we are constantly moving people about individually into the units. So what you really have to think about is how do you want to have your combat units laid out? Really, you do want to plug them in as units where they have already worked together. Each one understand how the other people's limits and capabilities are so they can function as an organic whole. You sort of have to work backwards from there, and then say OK, instead of tailoring personnel policies for the convenience of the bureaucracies, you have to look at what kind of combat power do you want to put out there. If you want to put in these whole units that are cohesive, then what kind of personnel policies do we set up so we can play in that direction.

I do not think that has even been done, yet. Some people may say otherwise. I know that Shy Meyer definitely tried to do that because he was familiar with that, but it sort of did not take.

Mr. LEHMAN. But one of the problems has been that Congress has looked at the military as kind of a social engineering challenge. There are so many—and requirements that are driven by legislation now that drives, if you look at managing a naval officer's career today, what he has to do just to get his basic warfare qualification, if he's a submariner, to go through nuclear power school and so forth, and then get his ship tours, and then get his basic professional schooling, and then get to learn something about the aviators and the surface warfare people. Then you want to get him a tour in the Pentagon so that at least he has some familiarity with budgeting and other processes. Then you lay on top of him a 4½-year requirement to get away from the Navy to go to a joint, to be on joint staffs and joint schools in addition to learning his own professional thing. Then you lay on the promotion sequence. You cannot be promoted to captain until you have had a command, and

you cannot get a command until you have screened, and you cannot screen until you have been through such and such a school. Already, it is impossible for an aviator, for instance, who goes through a nuclear carrier command path, ever to come to Washington, and he is about 3 years behind his peers to get promoted even then. That is without any joint tour. Without any joint tour at all.

What that means is you are compressing, already, against everybody's best judgment they cut the squadron command tour, for instance, down to 13 months instead of 2 years in some instances, in some 18 months. So everybody, the average flag officer has moved 30 times in his career, he's going like that. More rather than fewer requirements, more compressions have been added by Congress in the last 5 years than less. So you are not going to get unit cohesion if you have these people cycling with the velocity of sound through assignments.

Mr. CHAIRMAN. Let me ask one more question, and that is we have two people who are very active in the military reform, and two people who are very active in the Pentagon and other business.

Let me ask, tell me what you think differently now because of Desert Storm? What has Desert Storm caused you to say well, I used to believe A, but now I believe B? Is there anything like that?

Mr. HICKS. I guess I'm not totally surprised. One of the things I was surprised about, frankly, was the excellent way that the command used the new technologies. That is something that I think Bill Perry expressed at your hearing last week, too, that you might have doubted from past experience that they could really take advantage of these things. They took advantage of all of them, I thought, in a very fine way.

I think it also showed that if you find yourself in a situation where you have a survivable asset that has very, very accurate weapons that you can change the whole course of the war very quickly. It is the intensity at the first of the war, if it is broad enough, it can make the difference. I think that is what happened in Iraq.

So I stress the fact that to me, we have always talked about roll back. We have always thought about knocking down either passively or actively the defense systems and going in and clearing things out, letting the things that are not protected come in later. We know the massive amount of aircraft we have to have to protect the guy at the front. Talk about staffs, there are a huge number of staffs that go into the guy who is dropping the bomb, in most of the things we have done in the Air Force.

I think Desert Storm proved we do not have to do that. We can, in fact, with very few airplanes comparatively, and precision weapons, do a magnificent job. I think that is going to set a trend that will be major in the Air Force. It has proved to the Air Force something that I think those of us who have been working this thing thought was true, but this was proof.

Mr. LEHMAN. There were no really big surprises to me in the way the joint command performed or the units performed or the weapons performed. That is really what I had expected. There were some pleasant surprises in the success of the sealift programs, although the publicity seemed to go the other way. There was an enormous logistics effort that would have been utterly impossible

in the early 1980s. The ships worked incredibly well. These old dogs that had been sitting in the James River and the East Bay in San Francisco all these years, most of them came out quite well in short order and went right to sea. The SL-7s worked brilliantly well, with one ship had a CasRep which was a very good average.

But the real star were the pre-positioning ships. I was a bit skeptical that the pre-positioning concept would work as well in practice when the whistle blew as it did in theory and exercise. It worked better. The equipment came out in excellent shape, and it was again, an innovative concept that the Marine Corps came up with, that the Navy was very skeptical about, the Army rejected totally, and it worked brilliantly. So it would lead me to say we ought to do more of it, and take some of these POMCUS sets and put them to sea rather than building gold-plated fast deployment ships.

Mr. HART. As I said earlier, Chairman, because the people and the ideas worked so well, we really did not have a prolonged test of the equipment under extreme difficult conditions. So I would hope that we would weigh very carefully any kind of procurement philosophy based on this.

For example, I have heard recently second or third hand that a lot of the tanks we hit had no people in them. Therefore, they were not moving too fast. I do not know whether that is true or not, but it would have an effect on all these grand conclusions we make about the weaponry.

I have to take the occasion, although it is not on your point, to say that I still believe that we fought the war over oil, and we have made, because of the grand success of the war, we have totally overlooked that fact and are taking no steps to make ourselves independent of Persian Gulf oil.

Colonel BOYD. Some things I was surprised at. The big surprise to me, in one direction, it turned out better than I thought it would turn out, was how rapidly, once they got the campaign going, particularly the ground campaign, how they concluded it and there were so few casualties. I think everybody probably, not only in this room, but General Schwarzkopf himself was surprised at that, how well it went.

The other surprise which probably I was surprised at, was the use of the night vision devices so they could operate at night. They certainly played a big role. I have been an advocate of that from way back, that we should do more of the night warfare. I had seen some of those used over in Southeast Asia when I was there, of course they were much more primitive. I think when you start talking about the M1 tank, for example, you have to be very careful when you start evaluating that tank, what parts of it are you talking about? What really worked? That is why I would like to wait until the hardware evaluation came in.

However, one of the things that did work out very well was that thermal sight in that 120mm gun. As somebody pointed out here, when they arrived near the Iraqis, they had already bailed out of their tanks because we were shooting, we were picking them up, lazing them, hitting the range finder and pumping rounds into them, and they had not even picked us up yet. So their tanks are starting to go up and the rest of them did not know what hap-

pened. Panic and chaos, they took off. So you have to give gold stars for that kind of equipment.

Not only that, but just the night vision devices themselves so they could get in there and operate very heavily at night. I think one of the things, like in World War II, of course, they did not have that stuff, but people, they found out that few people that went in at night, one of the reasons why they did not want to do it, and this is a very important aspect of not only maneuver warfare, but any warfare, is some of the reasons why they say they do not want to do anything is because it is so confusing and disordered. But that is not the issue. The question is, if you train at that, even if it is difficult and it is confusing and disordered, and the other guy does not do it, he is going to be more confused and more disordered than you are, you generate this enormous leverage.

You see, it is this penchant for going for certainty. You cannot always go for certainty. The question you have to ask yourself is what happens to the other guy if I do it? Is he going to be more confused and disordered than I am? Great. Guess what he is going to get? He is going to get that. That is one of the things you do get out of the night operations, particularly when you have those night vision devices, so I think that was a big plus.

Mr. CHAIRMAN. Gentlemen, thank you very much. It was a really very, very interesting morning.

[Whereupon, at 12:30 p.m. the hearing was adjourned.]

SUSTAINABILITY AND RECRUITING OF ALL-VOLUNTEER FORCE

HOUSE OF REPRESENTATIVES, COMMITTEE ON ARMED SERVICES, DEFENSE POLICY PANEL, AND THE MILITARY PERSONNEL AND COMPENSATION SUBCOMMITTEE, *Washington, DC, Wednesday, May 1, 1991.*

The panel and subcommittee met, pursuant to call, at 9:39 a.m., in room 2118, Rayburn House Office Building, Hon. Les Aspin (chairman of the Defense Policy Panel) presiding.

STATEMENT OF HON. LES ASPIN, A REPRESENTATIVE FROM WISCONSIN, CHAIRMAN, HOUSE ARMED SERVICES COMMITTEE

The CHAIRMAN. The meeting will come to order this morning.

Let me announce now and again later when more Members are present that we have a long day's schedule here, including several panels. We will be doing a morning session and an afternoon session. It is my intention to go through this morning until about one o'clock, when the House goes in session, and then pick up at three with a panel this afternoon.

We have a very interesting panel this afternoon. The little TV sets are here to show people examples of the changes in the advertising that have taken place over the years to help recruit people into the all-volunteer force. Our panel opening this afternoon at three o'clock will be discussing the advertising of the all-volunteer force and how it has changed over the years and will address questions about whether it gives a valid picture of military life. Our opening panel this morning, however, is a very important one.

Today's hearing is the last in our current series devoted to examining the lessons of Desert Shield and Desert Storm for our future defense. The conflict made it clear we need a defense that works. Our job now is to find concrete ways to produce one. A defense that works relies heavily on the quality of its personnel.

One of our witnesses this morning deserves a great deal of credit for dramatically improving the all-volunteer Army and laying the groundwork for the outstanding force we deployed in the Persian Gulf. We are honored to have with us General Maxwell Thurman. General Thurman is the former Army Deputy Chief of Staff for Personnel, former Commander of the Training and Doctrine Command, and former Chief of Army Recruiting.

In the late 1970's, General Thurman was faced with an Army whose members were not required to obtain a high school diploma prior to enlistment. General Thurman changed that. With hard work and a lot of vision, General Thurman began a transformation of the volunteer Army. He established the very successful "Be all

you can be" campaign. He spearheaded initiatives to improve the quality of life for soldiers and their families. General Thurman fostered the growth of a new Army, for which we owe him a very great debt of gratitude.

The question we will consider today focuses on the all-volunteer force and the recruiting. Our interest is whether and how the war influenced the services' abilities to sustain a quality all-volunteer force. Can the services recruit enough volunteers with enough education to adequately operate the high technology equipment of today's military?

Our first panel will include General Thurman, Hon. Christopher Jehn, Assistant Secretary of Defense for Force Management and Personnel, and Hon. Stephen Duncan, the Assistant Secretary of Defense for Reserve Affairs. The panel will discuss the health of recruiting in the Active and Reserve components and whether our current policies need any revision in view of Operation Desert Shield and Operation Desert Storm.

Before we begin, I would like to call on Bill Dickinson, Beverly Byron, and Herb Bateman, respectively, of the Personnel Subcommittee for comments.

STATEMENT OF HON. WILLIAM L. DICKINSON, A REPRESENTATIVE FROM ALABAMA, RANKING MINORITY MEMBER, HOUSE ARMED SERVICES COMMITTEE

Mr. DICKINSON. Thank you, Mr. Chairman.

Let me join with you in welcoming our various members of the panel here today.

Twice the chairman and I with others visited the Gulf, once before and once after the war started. We talked with our troops, we found them motivated. For the most part, we didn't hear any complaints about being there. What we found were enthusiastic realists with uniform and high levels of quality and motivation. The grouching that we heard was not the fact that they were there or were called on to do a job. As a matter of fact, they seemed enthusiastic. The unhappiness had to do with comparing their situation with their sister service across the runway. Some had it better than others.

Well, as a matter of fact, just a small anecdotal remembrance. The Army was at one airfield. The Army helicopter group was staying in a five-tier garage with toilets that were 55-gallon drums built up on racks and weren't emptied on a regular basis. Their food supply consisted of MRE's three times a day. They were complaining because across the runway the Air Force was in air-conditioned tents, eating three hot meals a day, and had running water with flush toilets. The Army felt like there was some inequity there. I thought it was silly, but that's the way they felt.

But other than that, they were motivated, they were there, and they were not griping about it. So I think the all-volunteer concept, which was inaugurated by you, General Thurman, has not been a deceptive thing; we haven't lured people in to doing something they didn't expect to do. They were proud to be there. As the saying goes, they stood tall, they acquitted themselves quite well,

and, now that they have come home, they are glad that they went. Of course, they are more glad that they are back.

Let me say we are delighted to have you here today and we look forward to the testimony of all of you, and I think this could be very meaningful because there is some talk about whether or not we need to reinstitute the draft. Just up front, I would say I can't see any possible reason for it, but we will explore that during these hearings.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Let me next call on Beverly Byron.

Mrs. BYRON. Thank you, Mr. Chairman.

General Thurman, it is good to see you again.

General THURMAN. Thank you, Ma'am.

STATEMENT OF HON. BEVERLY B. BYRON, A REPRESENTATIVE FROM MARYLAND, CHAIRMAN, MILITARY PERSONNEL AND COMPENSATION SUBCOMMITTEE

Mrs. BYRON. I think this committee is looking at lessons learned, and I think the first lesson is that there is no question in anybody's mind that it works. This all-volunteer service that we have seen has stood tall and exhibited enormous capability and discipline within the troops. There was no question about this. We all would get up in the morning and turn on our television and see the young American men and women a half a world away so proud, standing and saying, "Good morning to America. Wake up. We are here taking care of you and protecting our values." The quality of that all-volunteer force is so dramatically obvious from those scenes.

I think it would worry me a little bit if I didn't hear some grouching from our troops, and, as Mr. Dickinson said, we all can relate individual stories. Yes, of course, some of the troops are going to complain. It is human nature to complain. I would really be quite concerned if I didn't hear any complaints.

My favorite story is one of an enlisted Air Force service member telling me, "Things are really bad." His desert uniform didn't even fit when he received it. He was about five feet six inches tall, and his uniform pants were too long. Standing next to him was a big, long, lanky six foot three individual, and I said, "You are very fortunate he didn't get your pants. It's all in how you look at things." He didn't think it was funny, but everybody else did.

We will have lessons learned for the next several years. We can always improve. This time, I think we have done some things right, and let me commend you, General Thurman, for the vision that you had so many years ago to talk about physical fitness and how important fitness was to the troops in any arena, whether it be in the desert or in the cold Arctic. I think that the soldiers being physically fit was a key factor in why we did so well.

In my conversations with the young men and women who participated in Operation Desert Storm, they have said that they are in as good a shape as they have ever been in their lives. So thank you for that.

The CHAIRMAN. Let me now recognize the ranking Republican on the Personnel Subcommittee, Herb Bateman.

STATEMENT OF HON. HERBERT H. BATEMAN, A REPRESENTATIVE FROM VIRGINIA, RANKING MINORITY MEMBER, MILITARY PERSONNEL AND COMPENSATION SUBCOMMITTEE

Mr. BATEMAN. Thank you, Mr. Chairman, and I welcome the secretaries, and, General Thurman, a very special welcome to you, and let me add to what has been said about you.

In the annals of the United States Army in this era, I don't know of anyone who has made a more solid and significant contribution to the status of the Army in its ability to fight, the doctrine by which it fights, and the quality of the people who would do the fighting than you have done.

The all-volunteer force and the way it performed in Desert Shield/Desert Storm certainly was no surprise to my colleague, Mrs. Byron, or me, or anyone else who served on the Personnel Subcommittee through the last several years. We would have predicted that the military would have done very well, and obviously they performed splendidly. The operational dimensions of their performance have been commented on positively and very appropriately.

There is one other aspect of it that I don't think has received the degree of attention that is warranted, and it is the anecdotal reference to the scene mentioned by the President in his address to Congress of the GI taking into custody some four to six Iraqi prisoners who were literally kissing his hand and seeking virtually to lick his boots as he said to them, "It's all right. You'll be safe."

The degree of discipline and the degree to which these forces all volunteered so admirably reflects the greatest and best values of the American people. I think that needs to be focused on, as this instance with the Iraqi prisoners indicates.

Another scene that I found very, very compelling was after the cease-fire and after American forces were dispatched to assist the Kurdish refugees at or near the Turkish border, a scene of a great big non-commissioned officer surrounded by a throng of Kurdish children, who, despite the adversity and the tragic circumstances surrounding them, had them laughing joyously and exchanging what had to be a very, very pleasant dialogue between himself and those children. Smiles were seen on the children's faces because of the warmth and humanity displayed by that American soldier. That was a tribute to the quality of this force that goes beyond operational and warrior skills to show how much and how well they represented American values.

Another aspect that is incredible about these forces that I noticed during my visit in December was the degree to which they could accept very difficult circumstances above the physical hardships and discomforts of an alien culture, and also accept restraints in their conduct which were far beyond anything regarded as reasonable in our country because they understood the importance to their mission. That is an incredible tribute to their judgment, to their professionalism, and to their character, and I am always happy to salute them. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Herb.

Let's move now to our first panel, and let me do it in this order: Gen. Max Thurman first, Christopher Jehn second, and Steve

Duncan third. We would like to hear your opening statements, gentlemen, and then we would like to ask some questions.

General Thurman.

**STATEMENT OF GENERAL MAXWELL R. THURMAN, U.S. ARMY
(RETIRED)**

General THURMAN. Thank you very much, Mr. Chairman. I appreciate the opportunity to come again before this distinguished committee and see many of my friends who supported us as we raised the all-volunteer force in the last decade.

I respectfully request that a copy of my notes—

The CHAIRMAN. Without objection, all statements, full statements, backup material, etc., of any of the witnesses will be put in the record.

General THURMAN. I believe that we are in interesting times at the moment, and the data at the moment is a little bit confounding as to what the health of retention and recruitment really is all about, and I will discuss that as I go through my pitch.

Recruiting goals and requirements are a product or by-product of how well all of the aspects of the armed forces are doing to produce a high quality force, and by that I am speaking particularly in the area of retention, which affects recruiting goals, and retention is then affected by training, by equipment, other personnel programs, and the doctrine that brings all of these things together. In the end game, a person joins the service for the purpose of going through arduous training and we have to prepare for that.

Recruiting is derivative of retention and is directly related to the training and to the quality of NCO's and officers at the brigade level and below, and so as we go through a period of draw-down we need to pay specific attention to what happens to these mid-level NCO's and young officers.

The greatest lesson I learned as a recruiter for quite a while is that in the recruiting business you are never standing still, it is a complex, tough business, and it is not, "What did you do for me last week?" it's, "What are you going to do for me in the next year?" and so we have to look ahead in our business.

We have a confounding period ahead of us. The victorious euphoria of Desert Shield and Desert Storm, all richly and justly deserved, is now contrasted with the imminent reduction in the armed forces, and so what do we know now? We know, for example, in the decade of the eighties that we brought a long-standing vision of how our armed forces ought to be put together. It was based on a concept of quality, quality in people, quality in equipment, quality in training, and quality in leadership, and I was interested in your panel discussions yesterday, which I saw on C-SPAN last night which talked about those concepts with Secretary Lehman and others. We built that force according to that vision, and we have seen it prevail now in the harsh environments from the jungles in Panama to the streets, sands, and cities of Iraq.

Another part of that vision was the total force concept. The concept is sound, absolutely essential, and, without question, it is a significant contributor to our two most recent successes in conflict.

We know that our investments in the world's finest equipment saved lives on both sides and shortened the war. That equipment, which was derivative of the concepts of our air/land battle doctrine that we envisioned, is best characterized by the defeated Iraqi soldier who never saw the Apache or the M1A1 tank or the Bradley fighting vehicle which engaged and destroyed his tank in the middle of the night. Yesterday I think John Lehman and Don Hicks talked about night vision devices and owning the night. So our vision has been tested, and it has passed muster.

As the committee well knows, all the services hit rock bottom in 1979 when none—underline “none”—of the services made their recruiting objectives, and you will remember those days as the days in which both the Navy and the Army had a desperate shortage of noncommissioned officers. We were some 17,000 short in the Army alone. General Shy Meyer proclaimed the hollow Army, and we were suffering recruiting failures.

Since that time, we have developed very sophisticated systems for recruitment and retention, and they have populated our armed forces with high quality American youth.

I commend the report that you issued last Friday, April 26, called “The All-Volunteer Force: Assessing Fairness and Facing the Future.” It is right on the mark, and every Member of the Congress ought to read it, and anybody interested in the matters we are talking about ought to read that document; it is very well done.

A recruiting program has to be built on a set of principles. The first principle is, you have got to recruit quality people—that is the objective function—and then you have to tell recruiters that that is what they are supposed to do, and recruiting with integrity is the standard.

We must understand what motivates youngsters, not us and not those that are already serving, but what motivates youngsters, so that we have a variety of enlistment options and skills to choose from. Parents, teachers, and other adults are influencers of youngsters, and we must keep them informed of service opportunities. Americans believe that education accounts; thus the effectiveness of the Montgomery GI bill and the service college funds.

Finally, quality recruiters must have the necessary resources to effectively communicate the enlistment options to both the potential applicant and to his or her influencers.

Last, there is the ebb and flow of the employment market and the judicious use of bonuses, the GI bill, the service college funds, and innovative market expansion programs can overcome variations in the employment market.

I have been asked, did we do everything right in the decade of the eighties? Probably not. Our success ebbed and flowed based upon unemployment, employment statistics, the ups and downs of the propensity of youth to join the services, and the resources provided by the Congress.

The point is that all of the services are skilled in the tactics and techniques of how to recruit for their particular service. I think there is at least cause for concern to me that well meaning people would suggest that we can have a DOD joint recruiting service which does it all for all services, active Guard, and Reserve. I find that hard to sign up to.

How do we maintain quality? We maintain quality by telling recruiters what our quality goals are, not simply what the mission is, and we use a holistic recruiting program: national advertising, face-to-face counseling, aptitude and physical testing, and meetings with the influencers and the applicants to tell it like it is.

In March 1991, the Army met with 12 potential recruits for every one enlistment in the Army. So it is not as if they are all lined up outside the recruiting station in Baltimore trying to get in today; we have to go out and work at them.

The youth of America are smart buyers. One of the questions that has been asked in the papers is, do people know they are liable to go to combat when we publish data about signing up for the Montgomery GI bill. That is where research pays off—the Youth Attitudinal Tracking Survey, done annually. In 1989, 48 percent of all the people that responded in that survey said, “I understand that if I sign up in the Army I’m going to combat.” That’s not bad that half the people in the United States who are in the youth market know that, and so that tells us that the young Americans are smart buyers.

We have to tell the potential recruit what is expected of a soldier, sailor, airman, and marine, that basic training is tough but he and she could make it, and, when they do it, they will be proud of having done it. All you have got to do is go to one graduation exercise, and it turns you on.

Providing tough and realistic training and basic training and in the units is essential. Therefore, part of this committee’s obligation, it seems to me, is to make sure that we don’t skimp on training funds both in units and in the training base. We train in peace as we intend to fight. Our goal is to leave our training mistakes on the fields of battle at Fort Irwin, California, and not take them into combat.

Providing caring, competent, and demanding leaders is a mark for maintaining quality. We have to be extraordinarily careful, as we draw down, to preserve the integrity and competence of our noncommissioned officer and commissioned officer corps.

Caring for families in peace and war is essential. Today’s soldier knows that if he or she is called to combat the family will be safeguarded. In the end our best recruiter is the soldier who reports back to his peers that the Army is a tough but caring institution, a color-blind institution, in which meritocracy reigns, and an institution in which one can be all one can be given the limits of his or her God-given talents.

What are the effects of Desert Storm/Desert Shield? First of all, I believe that fiscal year 1991 will be a year of confounding data in retention and recruiting in the active component. At the moment, accessions for the active Army are on track and quality is superb. I need not tell you that the Air Force is obviously doing it well because they have the air-conditioned places in the desert and are eating three hot meals a day. So the barometer of recruiting is what is going on in the Army. But the accessions are dynamite, and we have got 98 percent high school graduates so far and 75 percent 1 to 3A. It is an all-time record year. But I use the word “accessions” or actual enlistments.

Contract writing for new recruits in the active Army are lagging 18,000 behind last year—minus 18,000. The contract is the barometer of recruiting success for the future. We brought forward youths in our Delayed Entry Program to meet our accession needs for this year which is perfectly all right. That is called management and leadership.

The current unemployment situation of the 18- to 24-year-old population favors a move by the recruiting force into the street market rather than a balanced high school/street market strategy. As the recession eases—and there are various opinions about when it is going to do that—it will be back to basics, back into the high school markets as well as the street market.

The daily write rate for contracts has improved in the Army in the months of March and April, which suggests that young people who delayed deciding about volunteering for service have now begun to step forward, and, finally, the 18- to 24-year-old cohort continues to decline and will not bottom out until 1995, so that as the economy improves increased pressure on recruiting will occur even though the actual number to be recruited will go down.

Meanwhile, retention is very difficult to forecast in any of the components. My instincts tell me that in the active component we will have more soldiers who have served their country in an hour of need and done well at it, who will want to reenlist to continue service, than the Army can permit to reenlist, given the mandate to get down to a strength of 660,000 in 1992.

Right now, your Army has 843,000 people on active duty; 100,000 reservists are in that group, which will be mustered out over time; and then another 90,000 will have to be removed from the Army in order to make the end strength objective only 16 months from now—no inconsiderable management challenge. Therefore, involuntary separations will be required in order to maintain a balanced and ready force and to meet the dollar reductions and strength reductions that are ahead.

What is the outlook? I believe the high national esteem will continue to spur young Americans to seek service in the armed forces. The Youth Attitudinal Tracking Survey that has been run in December 1990 and January 1991 will give us some insights into youth propensity for service during a period in which there was considerable national debate concerning the deployments to the Persian Gulf and the potential for combat. In other words, that was done before the actual onset of hostility.

We need another YATS research vehicle early in the fall of 1991 to capture what young America has to say now that the conflict is over and the troops have returned home and the casualties have been few, thank God. Their views will influence the nature and content of service advertising in 1992, and of particular interest in that survey should be information on how American youth perceive service in the National Guard and Reserve.

Notwithstanding the reduced accession missions that lie ahead, I believe that the contract writing will become more difficult for the Army in 1992 as the recession ebbs and as the employment improves. I believe that the 1992 and 1993 advertising budgets are underfunded slightly. I believe that influencers—parents, teachers, and those who care about potential applicants—will contribute to

the tougher market conditions that lie ahead as publicity concerning budget reductions, base closures, and a smaller armed forces casts uncertainty on military career opportunities.

National Guard and Reserve. Neither the Army National Guard nor the Army Reserve are making their recruiting missions today. The National Guard is about 15,000 short this year thus far, and they are predicting they will be 12,000 short by 30 September this year. The Army Reserve is at present 6,000 short of its recruiting mission to date.

The reasons are many. One, we had a stop loss in the active component which reduced the natural flow of soldiers from the Army into the Guard and Reserve. These soldiers are called prior service category. What will their actions be in the future? Research is needed, and needed quickly, about that, and we may have to create special incentives to get them into the Selected Reserves.

What about nonprior service prospects? They took a "wait and see" attitude in the first 6 months of this year based upon the onset of hostilities, and their attitudes to be researched as well.

Then there are the attitudes of those who rallied to the call-up who need also to be researched. I suspect that the 74,000 Guardsmen and reservists who went to the Persian Gulf will be particularly proud of their service and their retention will be high.

Those who mobilized for CONUS or European duty may have lower retention rates, and we know that retention directly affects the recruiting situation.

In another category, medical personnel—doctors and nurses—who were called to duty may have had special problems associated with leaving their practices, and this is particularly true with doctors who had individual practices, contrasted with doctors who were in consortium practices or in major teaching hospitals.

I suggest then, before you have the joint conference mark—obviously, you will mark the bill before all this data can be assembled for you, but before the joint conference mark is done, I suggest you call some people back and ask them to report back to you on what the research tells you, because right now the confounding nature of it, I think, will continue until after the Fourth of July when the President has said everyone stand up and salute the Americans who went and did a great job in the armed forces, and so there is a euphoria going to continue through the Fourth of July.

But I suggest that when you mark the authorization act you look at some of these critical elements, and in this vein I recommend that the health care specialty pay for Reserve components that you enacted for Desert Shield/Desert Storm be enacted in permanent legislation.

Finally, in that permanent legislation I would commend to you a look and a review at 673(b). You need to make a provision, or it needs to be amended to provide for call-up of the IRR and filler personnel in the original 200,000 presidential call-up.

What about the draw-down ahead? It seems to me the Secretary of Defense has announced the armed forces goal for 1995, and he has announced those clearly and unambiguously, and in my statement on page 9, are the active component end strength numbers and the Reserve component end strength numbers for the year 1991, 1992, and 1993.

Moreover, the Congress, in the 1991 Defense Authorization Act, directed the services to size their active duty—underline “active duty”—end strengths in recruiting and retention programs for both officer and enlisted for a goal of 520,000 in the case of the Army for 1995. No such statement has been made with respect to Guard or Reserve strengths for the long haul. I would suggest to the committee that you don’t manage personnel, officer, and NCO management on a year-to-year basis. So you may want to take stock; you either ratify what the Secretary of Defense said in his statement of 550,000 for the Army Guard and Reserve. But year-to-year management about that will get you not a long way; it is a total concept, a total force concept; strength objectives need a total force look by the committee.

What is required then is a balanced and equitable reduction to meet these goals that will preserve the integrity of the military, maintain adequate force readiness—after all, that is what we are about—and cushion the blow for adversely affected career personnel.

In summary, you asked me, what can the Congress do? The Congress should take note that fiscal year 1991 to date is a confounding year. The media bombardment concerned with Desert Shield/Desert Storm information, including the “welcome home” salutes, have lifted the esteem of the armed forces in the eyes of their countrymen, and this favorable trend will carry on. Incidentally, if you had to procure that in the advertising market, no way. Al Martin will talk to you about that later this afternoon. But the favorable trend will carry on through the New York City parade on June 10, I believe, and the Fourth of July celebrations around the country.

After July, I believe, we can begin to measure truly what retention in the active Guard and Reserves and medical units are all about. In turn, we can measure the contract write rates by month by that time to determine if the applicants are enlisting in sufficient quantities to meet the recruiting objectives for the future.

I commend also that you review the constraints that the Congress is placing on the services as each service implements its draw-down operation. Section 711 of the Defense Authorization Act says, paraphrased—it directs the Secretary of Defense not to reduce medical personnel below the number serving on 30 September 1989, and that provision is later tied to CHAMPUS costs.

The effect of this constraint, in a practical matter, would mean that we would have to remove in the Army 800 other branch personnel in order to retain the doctors and health professionals covered by that constraint. If that is a series matter on CHAMPUS, as an alternative you might consider declaring that health care professionals be charged on a reimbursable basis, additive to the officers’ end strength, much as we do at the Corps of Engineers today in their reimbursement category.

I suggest that the committee review allocations for unit training in the budget to make sure that the tempo of training that has honed the readiness of our armed forces continues.

Finally, I suggest that NCO and officer promotions stay on track as we draw down. If you have to issue an omnibus cut this year on personnel, please excuse NCO and young officer promotions against those cuts. There will be enough trauma as the young troopers ago-

nize over the involuntary separations that surely lie ahead; they should not have to worry about promotions.

What matters in all of this? Everything matters. While reducing the force and treating people with dignity is to hold on to the principle of quality and to remember that the military institution is built on the integration of people, equipment, training, doctrine, leadership, and, most of all, pride.

I was taken with both Secretary Lehman and Don Hicks yesterday, in your committee, talking about high-tech weaponry. I would assert to you that in future conflicts one of the measures of success will be the quantity of casualties taken in the conflict, and we can thank God that we had very few in this conflict, although each one is to be regretted. But the point is that high-tech weaponry helped us reduce the casualties. So when we talk about the personnel issue, we are also talking about equipment, and training, and leadership, and the like.

We must remember then to provide the equipment that will protect the soldier, sailor, airman, and marine and make him a winner on the future battlefield. Our equipment has to be the best in the world. It is a moral obligation in order to protect our most precious resource, which is the Nation's youth, and we must continue the kind of realistic, frequent, and multi-echelon training that goes along.

The best retention tool is great training and enough of it. In the case of the Army, you look at flight hours per month—15 per month, for example, in peace time; 800 miles per year track operation for track vehicles; and a training center rotation for every brigade and battalion commander. That needs to be looked at in the context of a great Army, Navy, Air Force, Marine, or Coast Guard.

In passing, let me just say that shortly the President of the United States will append the 170th combat streamer on the United States Army flag, and when that 170th streamer is placed on that flag, emblematic of victory in Desert Shield and Desert Storm, each one of you ought to feel very good about it, because each one of you had a hand in making our forces victorious on the field of battle which is represented by that streamer.

Thanks very much, and thank you for letting me come before the committee.

PREPARED STATEMENT OF GEN. MAXWELL THURMAN

1 MAY 1991

REMARKS BEFORE THE POLICY PANEL, ARMED SERVICES COMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVESRECRUITING: PAST AS PROLOGUE

Mr. Chairman, members of the panel, I am honored by the invitation to speak before you today, especially on issues so vital to the nation's defense and to the continued good health of the Army and all the Services.

RECRUITING: PART OF THE SUCCESS

I understand that the principal subject of the hearing today is recruiting. I believe I know as well as anyone how important recruiting is to a Service, and how complex it is as a business. These are interesting times for recruiting and I am pleased to share my thoughts and observations with the committee.

I want to begin by putting recruiting in its proper place with all of the programs and systems which, together, provide for a sound and successful defense establishment. Recruiting goals and requirements are the results of, or by products of, how well all of the aspects of the enterprise are working to produce a high quality armed force. I am speaking of the training, equipment, retention and other personnel programs, and the doctrine that brings all of these things into dynamic play.

More specifically, recruiting is derivative of retention and is directly related to training and the quality of NCO and brigade and below officer leadership. Simply put, the best recruiting program in the world won't mean so much if the other parts of the military establishment aren't the best

in the world as well.

The Army has learned, over the past decade how to recruit. And while I am proud to have been a part of that success, the greatest lesson I took from my experience is that in the recruiting business, you are never standing still. You are either ahead or falling behind. In the very best of times it is a complex, tough business.

FROM VICTORY TO CHALLENGE

We have a confounding period ahead of us. The victorious euphoria of Desert Shield/Desert Storm -- all justly deserved -- is now contrasted with the imminent reduction of the Armed Forces. The unpredictable events of the past 18 months; the fall of the Berlin Wall, the collapse of the Warsaw Pact, and Operation Just Cause, all reasons for celebration, are also reasons for concern as we decide in what direction these changes will take us.

WHAT WE DO KNOW

There are lessons we have learned from the past decade, and from Desert Shield/Desert Storm that give us insight into how we must recruit and build the force even as we face this reduction.

During the decade of the 1980s we brought a long-standing vision into reality. It was based on the simple concept of quality: in people, in equipment, in training and in leadership. We built that force. We have seen it prevail in harsh combat environments, from the jungles and streets of Panama to the sands and cities of Iraq.

We know that the Total Force concept works. Now that it has been

tested, there are some refinements required, but the concept is sound, and was, without question, a significant contributor to our two most recent successes at war.

We know that our investments in the world's finest equipment and weaponry saved lives on both sides and shortened the war. The equipment was designed and procured for the AirLand battle doctrine, which is best characterized by the defeated Iraqi soldier who never saw the Apache or M1A1 or Bradley Fighting Vehicle which engaged and destroyed his tank.

So our vision has been tested, and it passed. The commitment to quality and the complementary alignment of active and reserve forces have proven out in circumstances that were most challenging.

Events of the recent past have however, brought us some personnel management challenges that will confound recruiting and require study and solution in the months ahead. As we prepare for these challenges, we will benefit by recalling how we built the Armed Forces of 1991.

As the committee well knows, all Services hit the nadir of recruiting in 1979 when none of the Services made their recruiting minimums. You remember those days -- the Navy and the Army were desparately short non-commissioned officers. General Shy Meyer proclaimed the "Hollow Army," and recruiting failures.

Since that time we have developed, with your help, very sophisticated recruiting systems that have populated our Armed Forces with great American youth. Your report, Mr. Chairman, The All-Volunteer Force: Assessing Fairness and Facing the Future, dated 26 April 1991, is right on the mark. I commend it for reading by all the members of Congress to put into perspective our current recruiting challenges.

In the eleven years since the beginning of the turn around in recruiting, we have learned that a recruiting program must be built upon a set of principles:

- Recruiting quality people is the objective.
- Recruiting with integrity is the standard.
- We must understand what motivates youngsters, so we have to have an effective research base to find that out.
- People vary in why they join the Services, so we have a variety of enlistment options and skills to choose from.
- Parents, teachers, and other adults are influencers of youngsters: we must keep them informed of Service opportunities.
- Americans believe that education counts; thus the effectiveness of the Montgomery GI Bill and the Service College Funds.
- Quality recruiters must have the necessary resources to effectively communicate the enlistment options to both the potential applicant and to his or her influencers.

-- Variations in the employment market can be overcome by the judicious use of enlistment bonuses, the Montgomery GI Bill, the Service College Funds and innovative market expansion programs.

Did we do everything right in the decade of the 1980's ? Probably not. Our success ebbed and flowed based on unemployment - employment statistics, the ups and downs of the propensity of youth to volunteer and the resources provided by the Congress.

The point is that all of the Services are skilled in the tactics and techniques of recruiting for their particular Service. There is enough difference in each Service's recruiting challenge to cause me concern when

well meaning people suggest we can have a DOD, "joint," recruiting service which does it all for all of the Services; active, guard and reserve forces.

HOW DO WE MAINTAIN QUALITY ?

We maintain quality by:

-- Telling recruiters what our quality goals are, not simply what their mission is.

-- Using a holistic recruiting program of national advertising, face to face counselling, aptitude and physical testing, and meetings with influencers to "tell it like it is." In March 1991, the Army met with 12 potential recruits in order to achieve one enlistment in the Army. The youth of America are smart buyers.

-- Telling the potential recruit what is expected of a soldier; that basic training is tough, but that he or she can make it if they work at it. And, that they will be proud when they have done it!

-- Providing tough realistic training in basic training and in the units. We must not skimp on training funds. We train in peace as we intend to fight. We strive to leave our training mistakes on the fields of battle at Fort Irwin, California, not to take them into combat.

-- Providing caring, competent, demanding leaders. We must be extraordinarily careful as we draw down to preserve the integrity and competence of our non-commissioned and commissioned officer Corps.

-- Caring for our families in peace and war. Today's soldier knows that, if he or she is called to combat, the family will be safeguarded.

In the end, our best recruiter is the soldier who reports back to his peers that the Army is a tough but caring institution, a color blind institution

in which meritocracy reigns and an institution in which one can be all that one can be to the limit of one's God-given talents.

EFFECTS OF DESERT STORM: THE SITUATION

FY91 will be a year of confounding data in retention and recruiting in the Active Component. At the moment:

- + Accessions for the Active Army are on track and quality is superb.
- + Contracts for new recruits in the Active Army are, however, lagging 18,000 behind last year. The contract is the barometer of recruiting success.

- + We have brought forward youths in our Delayed Entry Program to meet our needs for accessions this year.

- + The current unemployment situation for the 18-24 year old population favors a movement by the recruiting force into the "street market," rather than a balanced high school -- street market strategy. As the recession eases, it will be back to basics, back into the high school markets.

- + The daily contract write rate improved in the Army in the months of March and April which suggests that young people who delayed deciding about volunteering for service have now begun to step forward.

- + The 18-24 year old cohort continues to decline and will not bottom out until 1995, so as the economy improves, increased pressure on recruiting will occur, even though the actual number to be recruited will go down.

Meanwhile, retention is hard to forecast in any of the components. My instincts tell me that in the Active Component we will have more soldiers

who have served their country in an hour of need, and done well, who will want to reenlist to continue their service than the Army can permit to reenlist given the mandate to get down to 660,000 by 30 September 1992. Right now the Army has 843,000 on active duty, of whom about 100,000 are reservists, so about 90,000 will have to leave or be removed from the Active Army over the next 16 months.

Involuntary separations will be required in order to maintain a balanced, ready force and to meet the dollar reductions and strength mandates.

THE OUTLOOK

Active Component. I believe that the high national esteem in which the Armed Forces are held as a result of Desert Storm will continue to spur young Americans to seek service in the Armed Forces. The Youth Attitudinal Tracking Survey (YATS) run in December 1990- January 1991, will give us some insights into youth propensity for service during a period in which there was considerable national debate concerning the deployments to the Persian Gulf and the potential for combat. We need another YATS research effort early in the Fall of 1991 to capture what young America has to say now that the conflict is over and the troops have returned home and the casualties have been few; thank God. Their views will influence the nature and content of Service advertising in FY 1992. Of particular interest will be information on how American youth perceive service in the National Guard and Reserve.

Notwithstanding the reduced accession missions for 1992-1993:

-- I believe that contract writing will be more difficult for the Army in FY 1992 as the recession ebbs and employment improves.

-- I believe that the 1992 and 1993 advertising budgets are underfunded given the tougher market conditions ahead.

-- I believe that influencers (parents, teachers and those who care about potential applicants) will contribute to the tougher market conditions as publicity surrounding the budget reductions, base closures and a smaller Armed Forces casts uncertainty on military career opportunities.

National Guard and Reserve. Neither the Army National Guard nor the Army Reserve are making their respective recruiting missions now. The Army National Guard is predicting it will be 12,000 below the accession mission in FY 1991. The Army Reserve is, at present, 6,000 short of its mission. The reasons are:

-- Stop Loss stopped the natural flow of soldiers exiting the Army into the National Guard and Reserves. These soldiers are in the prior service category. What will their actions be in the future? Research is needed and needed quickly. We may have to create special incentives to get them into the Selected Reserves.

-- Non prior service prospects took a "wait and see" attitude in the first six months of this year. What their attitudes will be needs to be researched, and researched quickly to see if new incentives are needed here as well.

-- The attitudes of those who rallied to the call- up need to be researched as well. I suspect that the 74,000 Army Guardsmen and Reservists who went to the Persian Gulf will be particularly proud of their service and their retention will be high. Those who mobilized for CONUS or European duty may have lower retention rates. And we know that retention directly effects recruiting goals.

-- Medical personnel, doctors and nurses, who were called to duty may have had special problems associated with leaving their practices. I believe that those doctors in individual practices have had the most difficult challenge. Research will tell us what, if any, statutory remedies and/or special incentives will be required to maintain a high state of medical readiness. Before you mark the Authorization Act for FY 92, I suggest you review these critical elements of recruiting and retention. In this vein, I recommend that Health Care Special Pay for Reserve Component be enacted in permanent legislation.

THE FUTURE: THE REDUCTIONS

What about the drawdown ahead? First, it should be understood by everyone that it is going to happen. The Secretary of Defense announced the Armed Forces personnel goals for 1995 clearly and unambiguously. Second, there can be no question that it will be emotionally difficult in effect and organizationally difficult in execution.

For the Army, the 1995 strength is set at 535,000 for the Active force and 550,000 for the Reserve Component. And the budget now before this Committee has as its personnel goals for FY 92/93:

	AC End Strength	RC End Strength
FY 91	702,000	776,000
FY 92	660,000	693,600
FY 93	618,000	620,800

Moreover, the Congress, in the FY 91 National Defense Authorization Act has directed the services to size their active duty end strengths in recruiting and retention programs for both officers and enlisted to meet a

goal of 520,000 for 1995. Thus, the direction is clear from the Administration and the Congress. Now it becomes a matter of resource allocation and execution.

What is required is a balanced and equitable reduction which will preserve the integrity of the military, maintain adequate force readiness and cushion the blow for adversely effected career personnel.

WHAT CAN THE CONGRESS DO ?

I commend this committee for its first class report on recruiting. The attention you are giving this matter with this hearing is most important. I believe that FY 91 is a confounding year in the recruiting and retention arena. The bombardment of the media with Desert Shield/Desert Storm information, particularly the "welcome home" salutes, some of which are yet to come, have lifted the esteem of the Armed Forces in the eyes of their countrymen. If you had to procure that esteem through advertising; well, you could not buy it ! This favorable trend will carry on through the New York City parade and the 4th of July celebrations around the country. After July, I believe we can begin to measure retention in the Active, Guard and Reserves and medical units. In turn, we can measure the contract write rates by month to determine if the applicants are enlisting in sufficient numbers to make the recruiting objectives for FY 92. This committee needs to keep a watchful eye on the emerging data to make informed judgments for FY 92 and FY 93 resource levels. I am particularly concerned about the level of advertising. In the Army, its about \$10 million short in each year.

I also recommend you carefully review the constraints the Congress is placing on the Services as each Service implements its drawdown plan. For

example: Section 711, Defense Authorization Act of 1991, directs the Secretary of Defense not to reduce medical personnel below the number serving on 30 September 1989 ... tied to Champus costs. The effect of this constraint is to cause 800 other branch officers to be removed from the Army to retain doctors and health care professionals. As an alternative you might consider declaring that health care professionals be charged on a reimbursable basis, additive to the Army's officer strength.

I suggest you review resource allocations for unit training. The tempo of training that honed our forces must continue.

I suggest that NCO and officer promotions stay on track as we draw down. If you have to issue an omnibus cut against personnel, please excuse NCO and young officer promotions from those cuts. There will be enough trauma as the young troopers agonize over the involuntary separations that surely lie ahead. They should not have to worry about on time promotions.

WHAT MATTERS? EVERYTHING !

The way to maintain readiness while reducing the force and treating people with dignity is to hold on to the principle of quality and to remember that the military institution is built on the successful integration of people, equipment, training, doctrine, leadership and, most of all, pride.

To recruit the kind of quality youngster we must have, we must provide the equipment that will protect him and make him a winner on the battlefield. Simply put, our equipment has to be the best in the world. It is a moral obligation to our most precious resource, the nation's young people. We must continue the kind of realistic, frequent and multi-echelon training that we developed this past decade. In fact we must up the ante on joint

training and deployment exercises as we can expect contingency operations to become the rule rather than the exception.

The best retention tool is great training and enough of it. Right now the Army is committed to continue the intense training regimen that led to success in Desert Storm; fifteen hours per month of flight training, an operational tempo of 800 miles per year for track vehicles and a training center rotation for every brigade and battalion commander. The continued resourcing and execution of that training is as important to retention and thus to recruiting as are direct recruiting dollars.

CONCLUSION

Quality people armed with quality equipment trained to uncompromising standards by quality, caring leaders can accomplish the nation's National Security tasks. Your leadership and support are crucial. One day soon, the President will place the 170th combat streamer on the Army Flag, emblematic of the victory in the Desert Storm campaign. Whenever that flag passes, each of you can proudly say that you, as members of this committee, provided the wherewithal; the people, equipment, training and leadership to ensure that victory. There will be a 171st battle streamer in the future. We do not know when. But your wisdom and leadership will, in large measure, dictate our readiness when that time comes. God bless you all and God bless America.

The CHAIRMAN. Thank you, Max, and let me just return the compliment. Of the people in this room, you probably deserve more credit than anybody else for the quality of the force that was out there.

Next, Christopher Jehn.

Mr. DICKINSON. Mr. Chairman, could I ask one question relative to what he said before it is lost in the shuffle here?

You said 49 percent of the recruits said that they realized that they might face combat. You could tell me what in the hell the other 51 percent thought?

General THURMAN. Well, we didn't recruit them because they were in the lower mental category.

The CHAIRMAN. I guess that is one of the first requirements. Christopher Jehn.

STATEMENT OF HON. CHRISTOPHER JEHN, ASSISTANT SECRETARY OF DEFENSE FOR FORCE MANAGEMENT AND PERSONNEL

Mr. JEHN. Thank you, sir.

Many lessons are, in fact, going to be drawn from our experience in the Persian Gulf, and we may disagree and argue about a lot of them, and you saw some of that in yesterday's hearing. But to me, as the Assistant Secretary for Force Management and Personnel, two lessons are unarguable and very obvious. First, our Total Force Policy worked; and, second, I think the wisdom of an all-volunteer force was clearly validated.

All components of the Total Force worked. We tend to think just about the Active and Reserve components, but host nation support was essential in our success in the Persian Gulf. Our contractors made important contributions both in the United States and in theater. Our civilian employees within the Defense Department played key roles too, both here and, also the roughly 4,000 who worked in theater. Then, finally, of course, we are all aware of the superb performance of our military service members, both Active and Reserve.

The public in the last 6 or 8 months has come to know what those of us in the military have known for at least a half a dozen years—namely, that our military force today is the highest quality in history. For me, an important reason for that is the fact that it is an all-volunteer force, and the quality of today's all-volunteer force is due to the efforts of many, some of them in this room. General Thurman, of course, is correctly, justifiably, widely known as the man who turned Army recruiting around. We owe him a large debt of gratitude. But we also owe a debt of gratitude to a number of the Members of Congress and this committee's leadership for its support, advice, and counsel over the years to the Department.

But the idea itself is a great one. It is an American concept, and I, for one, have never really understood how anyone could argue or think that a force comprised of many conscripts, people who don't want to be there, could be better of force of quality, motivated volunteers, people who do want to be there, who take pride in what they are doing.

In any event, I think we have proved all our critics wrong. Some said it was only a peace time force. Well, we just fought and won a major war, and we did so by deploying only 25 percent of our personnel to the theater. We called up only 20 percent of the Selected Reserve, called up less than 10 percent of the Individual Ready Reserve.

Some said the force was too old. Well, a maturity, professionalism, calm-under-fire discipline, of our personnel disproved that silly criticism.

Some said the force was composed of the poor and the lower classes. The members of this committee know that charge is wrong as well. The facts are otherwise. Two separate studies, one done by the Congressional Budget Office, one done by the Department of Defense, using two different methodologies and approaches, came to the same conclusion: Our all-volunteer force clearly and completely represents today's society.

Some said the force is too black. To me, that is one of the most irksome, perhaps the most irksome, of all the criticisms. I think it demeans the voluntary career choice of all service members, but particularly blacks, whom this criticism implies are victims rather than willing, patriotic Americans who are dedicated to a career in the military. It also ignores the progress the military has made in mitigating prejudice and bias and the Department's undeniable role as the country's equal opportunity leader.

In short, neither the facts nor recent experience support any of these criticisms that we have heard frequently and perhaps most repeatedly in the last 6 or 8 months.

This high-quality, all-volunteer force, as General Thurman has noted, is a national asset that must be protected, and we solicit this committee's and the Congress's support in doing so. Today, we are optimistic, all the signs are positive, that we are going to be able to do that, protect the force, but we need to protect things like training, operating tempo, flying hours, that keep military careers challenging and rewarding. We need to protect the pay, the quality of life, of our service members, to keep faith with them and their families, and, of course, we need to protect the recruiting resources that ultimately keep that flow of good people coming into the military.

I would like to point out that in fiscal year 1991 our recruiting resources were 14 percent lower than those in fiscal year 1988. Given the uncertainties we face, many of them cited by General Thurman—uncertainty about the effects of the Persian Gulf war, uncertainty about the effects of the draw-down on the propensity of young men and women to enlist, uncertainty about the effects of the economy, and the continuing reduction of the pool of potential recruits—given all these uncertainties, I think further cuts to recruiting resources is extremely risky, and I solicit your help and advice in trying to protect this force that we have built with so much work and effort over the last 15 years.

Thank you very much. I stand ready to try to answer your questions.

PREPARED STATEMENT OF HON. CHRISTOPHER JEHN

Mr. Chairman and members of the Committee. It is my pleasure to appear before you today to discuss military recruiting, advertising, and social representation.

Since the implementation of the All-Volunteer Force (AVF) in July 1973, the United States has relied exclusively on volunteers to meet its military manpower requirements. Over the last decade, the Congress, the Military Services, and the Department of Defense have worked together to end the extremely unfavorable military manpower conditions of the late 1970s. The cumulative effect of years of inadequate compensation and under funding of recruiting programs had made it nearly impossible to attract and retain quality personnel.

With congressional support, we have built the most capable military force in our country's history -- composed of people who are intelligent, well-educated, motivated, and committed to the defense of our Nation. Once again there is a strong sense of pride and dignity in the military profession.

The focus of my testimony today is the current status of recruiting and advertising. Specifically, I will tell you what we know about the impact of Operations Desert Shield and Desert Storm on

recruiting and retention, current advertising strategies, and the socioeconomic status of today's military.

Impact of Operations Desert Shield and Desert Storm on

Recruiting and Retention

With the deployment of American troops to the Persian Gulf, we carefully monitored recruiting trends to determine if enlistments were significantly affected. This was difficult since the effects of the crisis in the Persian Gulf, the impending force drawdown and associated budget cuts, and the economy's impact on recruiting were intertwined. Despite our inability to precisely document and forecast these effects, we do know the Services are currently attracting and enlisting the numbers of quality young men and women they need to meet their Fiscal Year (FY) 1991 accession requirements.

Recruiting is a complex process and we use multiple indicators to assess it. Specifically, we examine (1) enlistment contract achievements, (2) enrollment in and attrition from the Delayed Entry Program, and (3) actual accession or enlistment success. All three play a role as recruiting barometers.

Contract missions are monthly recruiter goals established by the Recruiting Service Headquarters; these goals reflect the accession requirements for the fiscal year, plus predicted attrition and other factors deemed appropriate by the senior leadership of the Recruiting

Services. These requirements are not constant from month to month, but always exceed the accession requirements upon which they are based. Contract goals are not valid predictors of recruiting success over the short term; however, they can be used as indicators of recruiting trends if evaluated over time and with other indicators, such as Delayed Entry Program (DEP) loss or accession history.

Let's consider what has happened with recruit contracting since August, when Operation Desert Shield began. Table 1 compares Service monthly recruiting contract achievement for August 1990 through March 1991 to the same time period in the previous year. While the Services obtained a lower percentage of their contract goals in October and November 1990 than in 1989, all achieved their goals in December 1990. The Navy, Marine Corps, and Air Force continued to achieve their contract goals in January 1991; the Army only achieved 76 percent of its goal, but that was a result of having inflated its mission in anticipation of Operation Desert Storm. In February and March, all Services met their contract objectives, in part due to the increased interest of young people in enlisting for Operation Desert Storm. From a contracting perspective, we expect the Services to continue to meet their contract objectives for the remainder of FY 1991.

Table 1
Percent of Contract Achievement by Month
(August 1989 through March 1991)

	<u>Army</u>	<u>Navy</u>	<u>Marine Corps</u>	<u>Air Force</u>	<u>DoD</u>
August					
1989	104	92	112	110	102
1990	93	103	108	101	99
September					
1989	96	88	101	109	96
1990	100	94	80	104	95
October					
1989	93	103	104	100	98
1990	71	88	105	100	84
November					
1989	100	104	105	*	**
1990	76	73	98	98	81
December					
1989	101	100	103	*	**
1990	105	100	99	102	102
January					
1990	98	100	108	*	**
1991	76	100	108	100	102
February					
1990	97	106	108	123	105
1991	100	101	117	105	104
March					
1990	101	103	106	103	103
1991	100	100	118	104	103

*Air Force stopped recruiting in November and December in response to reduced recruiting mission for FY 1990.

**Unable to compute DoD total without Air Force data.

Statistics from the Delayed Entry Program (DEP), on the other hand, provide us with the beginning of a more complete picture of recruiting. When young men and women decide to enlist, they are placed in the DEP. The DEP allows the Services to enlist individuals into obligated reserve status immediately, in anticipation of their entering an active duty component within 12 months. This allows

young people to sign up for occupations of choice and the Services to control the flow of new recruits into training courses. We track the size of the DEP, as well as DEP losses, as part of our recruiting trend analyses. A DEP pool that will provide accessions 3 to 6 months out is considered a healthy recruiting indicator. Conversely, an unusually large DEP loss, especially over several months, is considered a negative sign.

Table 2 shows, by Service and DoD, how many individuals are enrolled in the DEP, or have already entered service, and the percent achievement of Service FY 1991 accession goals. As of March 1991, the Services already have achieved 86 percent of their FY 1991 accession goals with individuals who have enlisted plus those in the DEP through September 1991, reflecting results only slightly lower than for the same period last year.

Table 2
Non-Prior Service Delayed Entry Program (DEP)
(Numbers in Thousands)

<u>Service</u>	<u>As of March FY 1990</u>			<u>As of March FY 1991</u>		
	<u>DEP Plus</u> <u>Accessions</u>	<u>FY 1990</u> <u>Objective</u>	<u>Percent FY</u> <u>1990 Goal</u>	<u>DEP Plus</u> <u>Accessions</u>	<u>FY 1991</u> <u>Objective</u>	<u>Percent FY</u> <u>1991 Goal</u>
Army	76.9	87.5	88	65.7	80.6	82
Navy	68.2	79.5	86	62.7	79.7	79
Marine Corps	32.2	33.9	95	33.1	30.8	108
Air Force	<u>32.5</u>	<u>36.0</u>	90	<u>29.3</u>	<u>30.0</u>	98
DoD	209.8	236.9	87	190.8	221.1	86

We also monitor the number of people who leave the DEP before actually entering active duty. This is an important indicator, in that a significant increase in DEP loss rate can be a sign of recruiting problems. As shown in Table 3, there is considerable

month-to-month variation in DEP loss, both within and across the Services, and there is little difference between 1989-90 and 1990-91 DEP-loss experience.

Table 3
Percent Delayed Entry Program (DEP) Loss by Month
(August 1989 through March 1991)

	<u>Army</u>	<u>Navy</u>	<u>Marine Corps</u>	<u>Air Force</u>
August				
1989	12	17	25	*
1990	12	21	13	2
September				
1989	12	17	17	2
1990	11	21	26	2
October				
1989	11	20	14	3
1990	12	18	14	5
November				
1989	10	16	14	2
1990	13	20	18	5
December				
1989	18	18	12	5
1990	19	18	20	2
January				
1990	17	11	12	7
1991	17	16	18	3
February				
1990	18	10	12	1
1991	14	13	14	3
March				
1990	14	11	14	2
1991	10	12	20	3

*Data unavailable

However, the single most important indicator of Service ability to meet recruiting requirements is the actual number of men and women who access, or enter active duty: Are the Services bringing on active duty the numbers of high quality recruits necessary to sustain their future force structure? The answer to that question is clearly,

unequivocally, "Yes." For the first 6 months of FY 1991, all Services met or exceeded their non-prior service accession requirements, as shown in Table 4.

Table 4
Active Component Non-Prior Service Accessions by Service

Service	<u>Total Accessions (Thousands)</u>					
	<u>Fiscal Year 1990 thru March</u>			<u>Fiscal Year 1991 thru March</u>		
	<u>Objective</u>	<u>Actual</u>	<u>Percent</u>	<u>Objective</u>	<u>Actual</u>	<u>Percent</u>
Army	35.1	35.9	103	41.0	42.4	103
Navy	30.0	30.1	100	31.1	31.2	100
Marine Corps	15.2	15.3	100	14.4	14.6	102
Air Force	<u>17.9</u>	<u>17.9</u>	100	<u>14.7</u>	<u>14.7</u>	100
DoD	98.2	99.3	101	101.2	103.0	102

The quality of enlistees continues to be high. As Table 5 shows, for the first 6 months of FY 1991, 97 percent of new recruits were high school graduates compared with 91 percent for the same period in FY 1990. The percent of enlistees who scored average or above on the enlistment test (Armed Forces Qualification Test Categories I through III) rose from 96 percent in FY 1990 to 99 percent for the same period in FY 1991. Based on these data, we expect the Services to meet their FY 1991 end-of-year accession missions with quality higher than FY 1990.

Table 5
Armed Forces Qualification Test (AFQT) Category I thru III NPS Accessions
and High School Diploma Graduate (HSDG) NPS Accessions

Service	<u>Percent of Total NPS Accessions</u>			
	<u>Fiscal Year 1990 thru March</u>		<u>Fiscal Year 1991 thru March</u>	
	<u>AFQT I-III</u>	<u>HSDG</u>	<u>AFQT I-III</u>	<u>HSDG</u>
Army	96	89	99	97
Navy	91	86	99	95
Marine Corps	99	93	99+	97
Air Force	99+	99	99+	99
DoD	96	91	99	97

The outlook for April appears to be comparable to our recruiting success through March. The Services report increased interest in joining the military in response to the positive outcome of Operation Desert Storm. While not all interested individuals qualify for enlistment, those who do will help the Services meet manpower requirements through the end of FY 1991 and into the beginning of FY 1992.

We are confidently optimistic about the health of future recruiting. However, there are many factors that adversely affect recruiting success, including youth labor market variables (e.g., employment, pay, and youth population demographics). In addition, we now face smaller recruiting budgets as a result of force downsizing initiatives. Recruiting and advertising budgets for FYs 1988-91 are shown in Table 6. The DoD recruiting and advertising budget for FY 1991 reflects an austere program -- a \$58 million decrease from last year's budget measured in current dollars. The reduction affects primarily the active force programs. After adjusting for inflation, the active program reduction for FY 1991 expenditures equates to approximately \$139 million (in constant FY 1991 dollars), or a reduction of \$204 million since FY 1988 (13.6 percent).

Table 6
DoD Recruiting and Advertising Resources ^{1/ 2/}
(Current \$ in Millions)

	<u>FY 1988</u>	<u>FY 1989</u>	<u>FY 1990</u>	<u>FY 1991 ^{3/}</u>
Active Components:				
Army	615.6	618.5	576.0	513.0
Navy	333.4	342.2	374.3	371.2
Marine Corps ^{4/}	152.3	146.3	160.7	154.5
Air Force	155.6	156.5	160.5	144.4
Joint	<u>114.7</u>	<u>123.3</u>	<u>114.0</u>	<u>112.0</u>
Active Totals:	\$1,371.6	\$1,386.8	\$1,385.5	\$1,295.1
Reserve Components:				
Army National Guard	279.6	261.3	259.8	272.1
Army Reserve	204.1	182.2	214.2	237.8
Naval Reserve	85.5	88.3	90.3	90.5
Marine Corps Reserve	49.0	51.9	53.9	52.5
Air Force Reserve	35.6	33.0	33.7	32.3
Air National Guard	<u>43.1</u>	<u>45.7</u>	<u>47.5</u>	<u>46.2</u>
Reserve Totals:	\$ 696.9	\$ 662.4	\$ 699.4	\$ 731.4
DoD Totals:	\$2,068.5	\$2,049.2	\$2,084.9	\$2,026.5

^{1/} Includes all funds identified as enlisted, officer, and medical recruiting resources.

^{2/} For all years shown, active force includes cost of "kickers" (ACF and MCF) and Reserve Components include funding for the MGIB.

^{3/} FY 1991 figures show revised Service budgets with Congressional and OSD Comptroller reductions applied.

^{4/} Since active Marine Corps recruiters perform Reserve NPS mission, resources in the active budget were aligned to the Reserve Program.

Reserve Recruiting

The effect of the Persian Gulf crisis on Reserve recruiting is difficult to assess at this time. In the first half of FY 1991, the

Army was most affected, with the Army Reserve achieving 79 percent of its recruiting objective, compared with 104 percent for the same period last year. In addition, the Army National Guard achieved 67 percent of its FY 1991 semiannual goal, compared to 110 percent for FY 1990. Table 7 reflects these trends, and shows they appear to some extent in each of the Reserve Components.

Table 7
Reserve Component Enlisted Accessions by Service

<u>Service</u>	<u>Total Accessions (Thousands)</u>					
	<u>Fiscal Year 1990 thru March</u>			<u>Fiscal Year 1991 thru March</u>		
	<u>Objective</u>	<u>Actual</u>	<u>Percent</u>	<u>Objective</u>	<u>Actual</u>	<u>Percent</u>
Army National Guard	36.1	39.8	110	45.9	30.9	67
Army Reserve	29.0	30.3	104	28.9	22.9	79
Naval Reserve	14.7	14.7	100	11.3	10.7	82
Marine Corps Reserve	5.8	6.0	105	4.4	4.4	100
Air Force Reserve	4.6	5.9	128	4.4	3.5	82
Air National Guard *	—	—	—	—	—	—
Reserve Totals:	90.2	96.7	107	94.9	72.4	76

* ANG sets only a total enlisted annual goal

Several factors unique to the Reserve Components constrained Reserve recruiting efforts during the first 4 months of FY 1991. For example, Reserve recruiting was affected by the active component Stop-Loss action. Army Reserve recruiting also was initially suspended for those units activated and deployed to the Persian Gulf; this policy was modified in November to permit limited recruiting for activated Army Reserve units.

While there is some uncertainty about the current status of Reserve recruiting, the quality of enlistees remains excellent. Table 8 shows Reserve recruit quality for the first 6 months of FY 1991. Ninety percent of enlistees possessed high school diplomas and 97 percent scored average or above on the enlistment test. Both numbers are higher than for the comparable period in FY 1990.

Table 8

Armed Forces Qualification Test (AFQT) Category I thru III NPS Accessions and High School Diploma Graduate (HSDG) NPS Accessions

Percent of Total NPS Accessions (Thousands)

<u>Service</u>	<u>Fiscal Year 1990 thru March</u>		<u>Fiscal Year 1991 thru March</u>	
	<u>AFQT I-III</u>	<u>HSDG</u>	<u>AFQT I-III</u>	<u>HSDG</u>
Army National Guard	88	88 *	88	81 *
Army Reserve	92	88	96	85
Naval Reserve	100	89	100	88
Marine Corps Reserve	99+	96	100	97
Air Force Reserve	100	95	100	95
Air National Guard	99	75	100	85
DoD	96	92	97	90

* Includes equivalency certificates as well as diploma graduates

We believe that, in the near term, Reserve Components will meet their recruiting objectives. The effect on future recruiting, however, remains to be seen as activated reservists return to hometowns across the Nation. We must take care of our Reserve Component members and demonstrate during the demobilization process that we appreciate their service and sacrifices.

Retention

The Services have experienced excellent retention over the last few years. While we expect no difficulties during FY 1991 as well, it is too early to tell what effect Operations Desert Shield and Desert Storm, coupled with budget reductions, will have on retention. As you are aware, in August, the President authorized the Secretary of Defense to implement the Stop-Loss program. This program allowed the Services to retain all members who were participating in, or who were in direct support of, or who possessed critical skills associated with the Persian Gulf War. To date, all Services have implemented some level of Stop-Loss; the program peaked in mid-March with over 29,800 personnel affected.

While we continue to reenlist eligible members, we cannot compute the current reenlistment rates due to the use of the Stop-Loss authority. Any reenlistment rates computed at this point would be misleading as the pool of men and women eligible to reenlist or to separate has been significantly reduced. With the end of hostilities, the Services have begun to lift the provisions of Stop-Loss and are now releasing, extending or reenlisting those who are eligible. We will continue to monitor retention and expect FY 1991 retention rates to be comparable to those experienced in FY 1990.

Youth Attitudes Toward Military Service

The perceptions of today's youth concerning military service obviously have an impact on recruiting. To assess these perceptions, the Department annually conducts a survey known as the Youth Attitude Tracking Study (YATS). This survey asks a nationally representative sample of 10,000 young people about their future plans, particularly whether they are considering military service. The 1990 administration was conducted from early December 1990 through mid-January 1991, during the build-up in the Middle East and the start of Operation Desert Storm. Thus, respondents had an increased awareness of the dangers faced by men and women in uniform.

Preliminary data from the 1990 YATS are now available. Table 9 shows that enlistment propensity for young men remained approximately the same as in 1989. The slight decrease in propensity for the Navy, Marine Corps, and Air Force from last year was not statistically significant.

Table 9
Trends in Positive Propensity to Serve on Active Duty
for 16 to 21 Year-Old Males

<u>Service</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
Army	18	14	15	16	16	15	17	17
Navy	13	11	11	11	12	12	13	11
Marine Corps	12	10	10	11	11	12	13	12
Air Force	19	15	15	16	18	16	18	16
Any Service	35	30	30	32	32	32	34	34

More detailed analyses are underway and should be completed within 3 months. Those analyses will look at propensity of various demographic subgroups to serve, as well as examine youth attitudes toward the role of the United States military and reactions to recent world events.

Although attitudes and intentions do not translate directly into enlistments, we know that the more positive the level of propensity, the better the recruiting environment. The results from the 1990 survey provide a hopeful outlook for recruiting in the future, given the conflict in the Persian Gulf had the potential to markedly reduce propensity. In sum, the threat of war did not appear to dampen the willingness of American youth to serve. A post-Desert Storm follow-up is planned for June 1991 to assess any change in enlistment intentions since the early days of the conflict.

Effects of the Drawdown on Recruiting

Despite our involvement in the Persian Gulf, the Department is committed to reducing the size of our military forces in line with congressional direction. In fact, by the end of FY 1990, the active forces had already been reduced by 130,000 from a peak of 2,174,000 in FY 1987. Our plans are to continue the reductions until we reach an active strength of 1,630,000 -- a 25-percent reduction from 1987.

The Reserve Components will be reduced by 21 percent over the same period.

To ensure fair treatment of current, dedicated Service members and minimize involuntary separations, our reduction strategy relies heavily on accession reductions. But we constrain these cuts to ensure that we recruit adequate numbers to achieve our future requirements for quality, experienced men and women in the ranks with leadership abilities. To ensure that we access at appropriate levels, the Department has established a policy that the Services will recruit annually at a level not less than 85 percent nor greater than 100 percent of that required to sustain their future steady-state force. It may be necessary to waive these guidelines on occasion, and procedures for exceptions are contained in the policy.

Recruiting and advertising resources requested for FYs 1992 and 1993 provide a balanced mix of recruiting personnel, enlistment incentives, and funds for recruiting support and advertising to sustain recruit quality, provide nationwide exposure to military opportunities, and ensure a smooth transition to out-year accession missions as we evolve to a smaller force. We will continue to evaluate the implications of Operations Desert Shield and Desert Storm on all recruiting and advertising programs in order to achieve our military manpower needs under a volunteer system and tight fiscal constraints.

Recruitment Advertising

To satisfy force structure requirements mandated by Congress, the Department uses advertising designed to encourage young Americans to consider military service as a post-high school option. The resources devoted to that effort have declined dramatically in the recent past. Table 10 depicts the decline in advertising funds since FY 1988.

Table 10
DoD Recruitment Advertising Resources
(Current \$ in Millions)

	<u>FY 1988</u>	<u>FY 1989</u>	<u>FY 1990</u>	<u>FY 1991</u>
Active:				
Army	73.5	74.2	76.6	44.7
Navy	19.4	19.4	25.2	16.2
Marine Corps	14.8	15.2	16.3	11.0
Air Force	14.8	14.8	16.3	10.0
Joint	<u>27.0</u>	<u>31.3</u>	<u>15.6</u>	<u>13.4</u>
Active Totals	149.6	154.9	149.9	95.3
Reserves:				
Army National Guard	15.6	14.3	14.0	10.8
Army Reserve	22.9	20.8	21.4	19.4
Naval Reserve	4.0	4.3	3.9	3.2
Marine Corps Reserve	2.7	2.6	2.0	1.9
Air Force Reserve	3.9	3.7	3.8	3.2
Air National Guard	<u>2.1</u>	<u>3.1</u>	<u>3.7</u>	<u>2.6</u>
Reserve Totals:	51.2	48.8	48.8	41.1
Budget/Budget Submit	200.8	203.7	198.7	136.5

Totals for FY 1988, FY 1989 and FY 1990 are actual expenditures. FY 1991 figures reflect Service plans to implement recent congressionally-directed cuts to recruiting and advertising funds. Totals may not add due to rounding.

In FY 1991, the Department will spend nearly one-third less on advertising than it did in FY 1988. When adjusted for inflation, the reduction from FY 1990 actual costs to FY 1991 programmed costs is

\$70 million. When expressed in constant dollars, the decline in advertising resources since FY 1988 is more than \$90 million, representing a 39.7 percent reduction.

Because budgets are declining, military recruitment advertising must seek creative ways to present the opportunities for service to one's country to a population of young men and women who have many alternatives and varying interests. The broad objectives of recruitment advertising are to create and sustain an accurate and positive image of the Services, impart awareness of general military and specific Service opportunities and benefits to prospects and influencers, and to develop prospect leads. We accomplish this mission through a wide variety of media, including television, radio, and print messages. Table 11 details the Services' expenditures for national media in FY 1990.

Table 11
DoD Recruitment Advertising Expenditures by Media Type
Total Active and Reserve
FY 1990
(Current \$ in Millions)

	<u>Television</u>	<u>Magazines</u>	<u>Radio</u>	<u>Newspapers</u>	<u>Other*</u>	<u>Total</u>
Army	30.5	22.6	12.0	1.6	45.3	112.0
Navy	10.1	3.4	3.4	.4	11.8	29.1
Air Force	.6	5.7	1.5	.4	15.5	23.7
Marine Corps	2.9	.8	.9	0	13.7	18.3
Joint	<u>0</u>	<u>6.9</u>	<u>0</u>	<u>5.0</u>	<u>3.7</u>	<u>15.6</u>
DoD Total	44.1 (22%)	39.4 (20%)	17.8 (9%)	7.4 (4%)	90.0 (45%)	198.7

*Other includes expenses for lead fulfillment, direct mail, printing, local/regional advertising, and other miscellaneous expenditures.

Advertising alone does not produce enlistments. The Department and the Services work with Congress to develop incentives, such as the Montgomery G.I. Bill, the Army and Navy College Funds, and enlistment bonuses, designed to attract young people to the military. Besides incentives, the unique and common benefits of the various Services must be communicated to prospects and influencers alike. Even though all of the Armed Forces share similar attributes and characteristics, each Service is different and has appeals, incentives and offerings that interest different people. Training opportunities, tour lengths, location, image of the Service concerned, and even uniforms have different individual appeal.

While our message to prospective volunteers emphasizes elements of military service most likely to attract them, no attempt is made to hide the realities of military life. In the unlikely event that a few applicants do complete their initial processing at a recruiting station and arrive at basic training still unaware of the primary mission of the military, their first exposure to marksmanship, hand-to-hand combat, and physical training will surely end their confusion.

Our recruiting task is complicated by the fact that the Armed Forces require bright and educated people to handle the military's increasingly high technology equipment and the pressures of the modern battlefield; these are the same people in a shrinking pool of

individuals who are also sought by other employers for demanding jobs. In addition, the military is in the position of stimulating interest in a "product" (military service) which has significant "costs." Service may require a person to leave home, endure frequent and long separations from family and loved ones, live in spartan environments, experience extremely hostile and dangerous conditions, and possibly even give one's life.

The Joint Recruiting Advertising Program (JRAP) supplements the advertising programs of the Services by providing support which includes a "corporate" advertising campaign designed to cost-effectively communicate the benefits and opportunities common to all Services. From 1975 to 1978, the Joint advertising program consisted of modest print and direct mail efforts. The creative thrust highlighted individual Service identity; it also included an appeal to developing individual potential, which had been shown in market tests to be more influential than an appeal to patriotism.

Following additional concept testing in 1979, a new creative campaign and slogan were adopted: "It's A Great Place To Start." Test results showed the new campaign to have a positive impact, evoking a high top-of-mind awareness for the Armed Forces among prospects and influencers. The campaign communicated the key ideas of opportunity, getting ahead, and job/skill training.

In 1985, the "We're Not A Company...We're Your Country" campaign was introduced. The tag line, "It's A Great Place To Start," was retained. The new campaign focused on four specific benefit areas: long term career development, long term personal development, quality experiences with quality people, and a job of which you can be proud. In 1989, following extensive copy testing, a totally new campaign, using the tag line, "Opportunity Is Waiting For You", was introduced. Again, the key messages were opportunities and personal benefits.

The Middle East situation focused the country's attention on many of the factors that make recruiting challenging, and, at the same time, increased the awareness of military service among our target audience. Given the circumstances that made Operation Desert Storm necessary, we believe that the reasons young people are enlisting may have changed. Pride, patriotism, and being part of a team now seem more important to young men and women. Consequently, we made some changes to our advertising strategies.

During the crisis, we did not advertise as much as we did during the same period a year earlier. After the outbreak of hostilities in January, the Services suspended virtually all mass media advertising and did not resume until after the end of offensive operations. In addition, we changed our Joint-Service ads from a training and opportunity message ("Opportunity is Waiting for You") to a theme

stressing the rewards which can be derived from doing something for our country ("Stand Up, Stand Out").

Now that the Armed Forces' involvement in the Persian Gulf has been reduced, we continue to examine the effect the war had on the propensity of youth to enlist. A relatively swift return to pre-Desert Storm market conditions is anticipated, and the greatest task facing us will likely again become the management of severely reduced resources and smaller end strengths. The Department and the Services, with the support of Congress, have made a large investment in a positive public representation of military service through years of advertising. The recent, sterling performance of our All-Volunteer Force validates that image. The public's perception translates directly into our ability to attract quality young Americans; we must ensure we do not jeopardize this favorable situation.

Minority and Socioeconomic Status of Military Members

Some recent reports in the press have incorrectly characterized the minority and socioeconomic composition of the military. This section addresses that issue.

Socioeconomic Status

Many assertions about the socioeconomic status (i.e., "class" composition) of the military are based on impressions and anecdotes rather than on quantifiable data. However, the facts show that

enlisted military members come from backgrounds that are only slightly lower in socioeconomic status than the national average.

In a recent study, conducted between April and September 1989, we surveyed over 10,000 recruits in basic training and asked questions about their socioeconomic backgrounds. We learned that the majority of recruits' parents had a high school education or better, were married, owned their own homes, and were employed. The contention that the enlisted force is recruited primarily from the lower socioeconomic strata of society is not supported by the facts.

Using home ownership as a surrogate for income, we learned that 79 percent of recruits' fathers and 72 percent of their mothers owned homes; this compares to 84 percent and 75 percent of comparable civilian youth's fathers and mothers, respectively. With regard to employment, recruits' fathers are less likely than all civilian fathers to be unemployed (2.0 vs 2.3 percent), while recruits' mothers are more likely to be unemployed (6.4 vs 3.9 percent).

A look at parents' education (Tables 12 and 13) reveals that parents of military enlistees have educational levels comparable to parents of civilian youth. While recruits' parents included proportionately fewer college graduates and more individuals with less than a high school diploma than observed for parents of civilian youth, these differences were not large. Moreover, for parents who graduated from high school but did not hold a college degree, recruits'

parents were more likely to have had some college than were the parents of civilian youth.

Table 12
Education of Male Parents for
FY 1989 NPS Recruits,
with Parents of Civilian Youth (PCY)
(Percent at Each Education Level)

Highest Level of Education	Army	Navy	Marine Corps	Air Force	DoD	PCY
Less than HS Grad.	24	24	24	16	23	19
HS Graduate	35	34	36	36	35	36
Some College (No 4-year Degree)	23	23	21	27	23	18
College Grad.	18	19	18	21	19	26
Total	100	100	100	100	100	100

Columns may not add to totals due to rounding

Table 13
Education of Female Parents for
FY 1989 NPS Recruits,
with Parents of Civilian Youth (PCY)
(Percent at Each Education Level)

Highest Level of Education	Army	Navy	Marine Corps	Air Force	DoD	PCY
Less than HS Grad.	22	20	20	15	20	19
HS Graduate	40	41	44	44	41	44
Some College (No 4-year Degree)	25	26	22	27	25	20
College Grad.	13	14	14	14	14	16
Total	100	100	100	100	100	100

Columns may not add to totals due to rounding.

Occupational status of enlisted recruit and civilian parents was examined across 13 major census categories, and appears in Table 14. In general, occupational distributions for recruit and civilian parents were similar. Not surprisingly, fathers of recruits were more likely to be military members than were fathers of civilian youth.

Table 14
Percent of Parents in Each Occupational Category by Gender,
with Parents of Civilian Youth (PCY)

Occupation	Male Parents		Female Parents	
	DoD	PCY	DoD	PCY
Executive, Administrative, Managerial	12	18	8	11
Professional	8	13	13	15
Technical	3	2	4	3
Sales	8	11	11	10
Clerical, Administrative Support	5	4	29	29
Protective Services	4	3	1	1
Other Services	4	4	21	16
Farming, Forestry, Fishing	3	4	1	1
Precision Production	26	22	3	3
Machine Operators	9	8	8	8
Transportation	10	8	1	1
Handlers, Helpers, Laborers	3	4	2	2
Military	3	*	*	*

*Less than one percent

Most recruits are young men and women who have chosen the military, rather than college, as their first step after high school. The majority are probably entering the military as an alternative to the civilian workforce. Many, attracted by military education benefits, are interested in attending college later, but cannot afford it at present. Recruits include sizable numbers of middle and upper middle class youth who have decided to enlist, deferring their college plans.

The All-Volunteer Force also includes the officer corps, which makes up almost 15 percent of the total force. Virtually all newly commissioned officers in FY 1990 were college graduates. At commissioning, they brought with them the cultural and academic diversity of the Nation's campuses and the regional outlook of almost every American community.

Minority Representation

Perfect demographic representation would exist, in theory, if military manpower were made up of persons who exactly replicated the national population in terms of race, gender, geographic and social origin. In the 1960s, the public had begun to question the demographic composition of the Armed Services, and during Vietnam, the Selective Service System came under attack for deferment policies which favored affluent whites. More recently, critics of the volun-

teer force have charged that the white upper middle class and upper class may not be doing their part for defense.

In a volunteer environment, two factors determine force composition: (1) who is willing to serve, and (2) whom the Services choose to accept, based on their enlistment and reenlistment standards. Those who are opposed to Black overrepresentation assume that service in the military is onerous. Evidently, Black members disagree. Not only do Blacks voluntarily enlist, their reenlistment rates are higher than the rates for whites.

The Black representation data are informative. In FY 1990, Blacks comprised 22.9 percent of our enlisted active force (Table 15), compared to 12 percent in the national 18 to 44 year-old population. Our officer force is composed of approximately 7 percent Blacks.

Table 15

**Blacks as a Percentage of Active Duty Enlisted End Strength
by Service and Total DoD, Selected Fiscal Years**

Fiscal Year	Service				DoD
	Army	Navy	Marine Corps	Air Force	
1975	22.2	8.0	18.1	14.6	16.1
1977	25.5	8.5	17.3	14.6	17.4
1980	32.9	11.5	22.4	16.2	21.6
1983	31.4	12.8	20.5	16.8	21.5
1986	29.6	14.2	20.5	17.2	21.2
1989	31.2	16.9	20.7	17.3	22.3
1990	32.1	17.7	20.7	17.6	22.9

In FY 1990, Blacks comprised 20.7 percent of non-prior service enlisted accessions, compared to 13.9 percent in the 18 to 24-year old population. Since the implementation of the AVF in 1973, Black participation has steadily increased, from both a recruiting and retention perspective. Table 16 shows non-prior service enlisted accessions for selected fiscal years between 1975 and 1990.

Table 16

**Blacks as a Percentage of Non-Prior Service Accessions
by Service and Total DoD, Selected Fiscal Years**

Fiscal Year	Service			Air Force	DoD
	Army	Navy	Marine Corps		
1975	20.0	6.6	17.2	11.4	14.8
1977	29.4	10.7	20.5	11.1	20.0
1980	29.9	13.4	23.3	15.0	22.1
1983	22.0	14.2	17.1	14.3	17.9
1986	22.3	17.3	17.2	13.9	19.0
1989	26.3	21.5	17.6	12.2	21.5
1990	25.2	21.0	17.5	12.3	20.7

Other ethnic groups (e.g., Hispanics, American Indians) are underrepresented in the military. In FY 1990, Hispanics represented 6.9 percent of non-prior service enlisted accessions, compared to 11 percent in the civilian population of enlistment age.

Finally, we have examined the participation of minorities in the Persian Gulf; Table 17 shows their distribution (officers and enlisted combined) as of mid-December 1990.

Table 17
Percentage Distribution Blacks
Military Population Versus Desert Shield Deployed Population
As of Mid-December 1990

Service	Total Blacks	Desert Shield
Army ¹	28.9	29.8
Navy ¹	14.8	21.3
Marine Corps ²	19.0	16.9
Air Force ²	15.2	13.5

¹Numbers include both active, Reserve, and National Guard members called to active duty

²Numbers reflect active duty population only

There was some variation among the Services. Blacks in the Army, Marine Corps, and Air Force were deployed in about the same proportion as represented in their Services. In the Navy, the proportion of Blacks deployed was somewhat higher than its proportion in the Service.

Changing the racial or ethnic mix of the military would require the use of quotas by race or ethnicity. Under our current system of voluntary enlistments, the Services make no attempt to regulate the minority or socioeconomic characteristics of new recruits. They do not use social or demographic criteria for enlistment. The enlistment standards in use are designed to ensure that the best qualified

applicants are accepted. Highly qualified individuals are not turned away, and preferential treatment is not given to any applicant over an equally qualified one because of membership in any racial or ethnic group.

The military offers challenges, compensation, responsibility, and opportunities for service which are based on merit, not membership in a specific racial or ethnic group. Regrettably, equal opportunity is not always a reality in the civilian sector. On the other hand, the Department's equal opportunity success is attested to by the presence of significant numbers of minority members.

Interestingly, those who complain about Black overrepresentation imply that military service is an onerous, unpleasant burden. In doing so, they fail to recognize that the military is an honorable profession offering challenges, rewards, and opportunities to those who volunteer -- not the least of which is the opportunity to serve one's country. Additionally, some critics demean the patriotism and contributions of Blacks by portraying them as "victims" needing protection; in doing so, such critics miss the point that the Blacks who have chosen to serve are highly capable, willing, and loyal Americans.

We plan to continue to offer military opportunities to those who volunteer and qualify--regardless of race or ethnicity. Our mission is to fill the ranks with those persons whose educational attainment

and aptitude scores predict that they will be successful and productive Service members.

Conclusions

Significant improvements have been made in defense manpower over the last 10 years. Credit for this success in attracting and retaining high quality personnel belongs to Congress, the Services, and the Department. The volunteer military stands ready, willing and able to defend freedom and deter aggression. It appears that Operations Desert Shield and Desert Storm had no adverse effect on recruiting. Our recruiting barometers indicate the Services are doing well -- attracting and enlisting the numbers of quality young men and women they need to meet their FY 1991 accession requirements.

Recruitment advertising is an important part of the accession process. Our message to American youth highlights all of the elements of military service, the benefits as well as the commitment required. While the Persian Gulf conflict mandated a short-term change in our advertising strategy, recruiting efforts continue to address the benefits of serving our Nation, particularly as world events make the demands of the military evident to all.

We do not believe the socioeconomic or minority composition of the force is in any way inappropriate. We have learned through research that recruits' socioeconomic status is similar to their

civilian counterparts and, thus, recruits do not overrepresent the lower socioeconomic strata of society. In terms of minority representation, we are proud of the Department's record of equal opportunity. Our primary concern is with the quality of our recruits, and as I have described, it is very good. Our policy is to offer military opportunities to all who volunteer and qualify.

The CHAIRMAN. Secretary Jehn, thank you very much.
Stephen Duncan.

**STATEMENT OF HON. STEPHEN DUNCAN, ASSISTANT SECRETARY
OF DEFENSE FOR RESERVE AFFAIRS**

Mr. DUNCAN. Thank you, Mr. Chairman.

I would like to take just a brief moment to make a personal observation, if I might. I worked with General Thurman on Total Force and Reserve matters, I went down to Panama for Operation Just Cause, and we had lots of Reserve volunteers serving in that conflict. But, I also have worked very closely with him in my role as the Department's Drug Coordinator. I will tell you that I can only stand in awe at what I believe to have been remarkable leadership on many fronts, not just in recruiting. His service as Commander in Chief of the Southern Command injected a level of energy and leadership into the very new, complex counter-narcotics mission of the Department of Defense that was badly needed, and I certainly would like to join you in the salute to this magnificent soldier this morning.

I submitted two rather comprehensive statements. I try to anticipate what the committee's areas of interest might be. I am going to be very brief with my opening comments. Let me simply join in the conclusions of General Thurman and Secretary Jehn in saying that I endorse the concept of the All-Volunteer Force and couldn't agree more that the Total Force Policy worked in spades in Operations Desert Shield and Desert Storm.

When we talk about what it takes to attract Reservists and National Guardsmen and to keep them in the force, a few additional factors have to be understood, and sometimes these factors are intangible and they are not clearly understood.

Certainly, financial incentives and those kinds of things are important. No doubt about that. But, we are talking about "citizen-soldiers", people who have civilian careers that they are pursuing. I work very hard to avoid placing those individuals in a position where they have to make a choice between a promotion in their civilian work place to general manager and promotion to be the battalion commander or the sergeant major. We are walking that fine line between not presuming upon their time but stretching them and stimulating them. I guess the factors that I find so terribly important to attracting the quality and the caliber of people we have in the Reserve forces are certainly what Secretary Jehn and General Thurman said with respect to training.

The financial incentives are important, but when it comes right down to what keeps them there, it is being stretched; it is stimulating training; it is recognizing that we have given them modern equipment and we have given them serious responsibilities both for peace-time and for war-time missions. We really are relying upon these people who are volunteering their time away from their civilian work place and their homes and so forth. If they are stretched, and if they see the direct connection between their sacrifices and the needs of the Nation, they are going to continue to remain with us and to join, and at such time that they don't see that connection, we are going to have trouble.

So our challenges, along with the ones that have been identified previously, are to make sure the Reserve forces understand just how important they are to the Nation in the context of the Total Force. If there was any doubt prior to August 22, 1990, I hope it has disappeared, because we didn't hesitate to call up almost 228,000 National Guardsmen and reservists. About 106,000 of those individuals actually served in the theater of operations. By any standard of measurement, they responded quickly, they performed well, they performed exceedingly well, and the number of problems we had were statistically insignificant. Seventy-one of them paid the ultimate price for freedom in that conflict. We will be studying our experiences, just as the rest of the Department will be, for some time.

I don't have all of the lessons learned yet, but I think so long as we can continue to help those Guardsmen and reservists understand the connection between their personal sacrifice and the needs of the Nation, I will not have any doubt about the long-term prospects for our recruiting and retention within the Reserve forces.

With that, Mr. Chairman, I will simply close and look forward to your questions.

PREPARED STATEMENT OF HON. STEPHEN M. DUNCAN

Mr. Chairman and Members of the Panel and Subcommittee:

I am very pleased to appear before you this morning to discuss the effect of Operations DESERT SHIELD and DESERT STORM on recruiting, retention and related matters within the Reserve components. I have submitted a second written statement on the status of the Reserve components and the Department of Defense Total Force Policy and I appreciate the opportunity to include both statements in the record of this hearing.

As you know, on August 22, 1990, only twenty days after the Iraqi invasion of Kuwait, and pursuant to Title 10, U.S.C. Section 673b, the President authorized the Secretary of Defense to call units and certain individual members of the Selected Reserve to active duty. This call-up authority had never before been used. The first call-up of specific National Guard and Reserve units was announced two days later.

Subsequent to that time, the activation of Reserve units and individuals continued at a rapid pace. On January 18, the President exercised his authority under Section 673 of Title 10 to order units and individual members of the Ready Reserve to active duty. This was also the first exercise of this particular authority. In implementing the authority, the Secretary of Defense authorized the call to active duty of as many as 360,000 Ready Reservists. The Secretary directed that no member of the Ready Reserve ordered to active duty under Section 673 be required to serve in excess of twelve consecutive months, including any service since August 2, 1990.

Almost 228,000 Reservists have actually been ordered to active duty and 106,000 have served in the Kuwait Theater of Operations. Tens of thousands of additional Reservists have volunteered or have been called to active duty to serve at bases in the United States and in other parts of the world. They have performed a wide range of combat and support missions, many of which I have described in the other written statement that I have submitted in connection with this hearing.

The fact that it had not been necessary for any President to call Reservists to active duty in over two decades had caused some observers to believe that Reservists would not be called for any crisis short of a global conflict. Two of the most impressive and rewarding aspects of Operations DESERT SHIELD/DESERT STORM, however, have been the smoothness of the process by which Reservists have been activated, and the responsiveness of Reservists in every service to the nation's call to arms in what the Commander-in-Chief of Forces Command has called "the largest, fastest mobilization since WW II." The Reservists, including units and individuals from the National Guard, have responded with alacrity and high motivation. No significant problems have been encountered and with minor exceptions, the number of Ready Reservists unable to deploy has been comparable to that of Active units. The fact that almost 228,000 Ready Reservists have responded in this way is, by itself, eloquent testimony to the quality of the modern American National Guardsman and Reservist.

Reserve Manpower Objectives

The year-end strength of the Selected Reserve (of all of the Reserve components) which is requested in the President's Budget for FY 1992-93 will decrease by 14 percent between FY 1990 and FY 1993. At the end of FY 1993, the Selected Reserve will total 988,600. This will be the first time since FY 1982 that the Selected Reserve end-strength is less than one million. The end-strength for FY 1991 is projected to be 21,713 above the FY 1990 actual strength, primarily as a result of Congressional action which restored previously planned reductions of nearly 20,000 in the Army National Guard and Army Reserve. By comparison, the FY 1993 end-strength for the Active forces will decline to 1,794,500, some 249,200 or 12 percent less than the FY 1990 level.

The most substantial strength reductions will take place in the Army Reserve components. The Army Reserve and Army National Guard will incur a combined reduction of 133,500 between FY 1990 and FY 1993. The Air Force Reserve will be the least affected, with a reduction of 1,400 personnel. The Naval Reserve and Marine Corps Reserve will have reductions of 25,700 and 5,600, respectively, during the same FY 1990 to FY 1993 time-frame.

The force structure reflected in the President's budget is based upon both budgetary imperatives and the new military strategy which continues to assign major responsibilities for the nation's defense to the Reserve components. The composition of the Total Force will be determined by the requirements of the new strategy and will not be the result of an effort to reduce Active

and Reserve forces by the same amount in order to "share the pain" equally. Despite the overall reduction in budgeted strength, the Selected Reserve will continue to constitute about 35 percent of the 2.8 million member Total Force in FY 1993.

TABLE I

Selected Reserve Manpower
(End Strength in Thousands)

	Actual FY 1990	Estimate FY 1991	Budget FY 1992	Budget FY 1993
Army National Guard	444.2	457.3	410.9	366.3
Army Reserve	310.1	318.7	282.7	254.5
Naval Reserve	152.8	153.4	134.6	127.1
Marine Corps Reserve	44.5	43.9	40.9	38.9
Air National Guard	117.8	117.0	118.1	119.4
Air Force Reserve	<u>83.8</u>	<u>85.6</u>	<u>81.2</u>	<u>82.4</u>
DoD Total	1,153.2	1,175.9	1,068.4	988.6
Coast Guard Reserve	12.1	12.0	12.0	12.0

Recruiting Outlook

Demographic projections for the decade of the 1990s suggest a declining population of young, qualified candidates for military service. Improved training opportunities, incentive programs, and entitlements, such as the Montgomery GI Bill, will continue to be imperative if we are to continue to succeed with our Reserve manpower programs. Table II summarizes trends in the recruiting of enlisted personnel in the Selected Reserve.

TABLE II

DoD Selected Reserve
Enlisted Accessions Summary
(Members in 000s)

<u>CATEGORY</u>	<u>Actual FY 80</u>	<u>Actual FY 85</u>	<u>Actual FY 90</u>	<u>Budget FY 92</u>	<u>Budget FY 93</u>
Army National Guard	97.1	83.0	76.6	58.8	56.8
Army Reserve	59.4	78.9	67.5	51.0	45.6
Naval Reserve	28.1	33.1	35.4	14.7	22.2
Marine Corps Reserve	9.3	9.7	11.8	9.9	9.2
Air National Guard	16.0	14.9	12.3	12.9	13.1
Air Force Reserve	12.1	13.2	11.9	11.8	13.0
TOTALS	222.1	232.8	215.5	159.1	159.9

The quality of enlisted Reserve personnel remains high. In 1990 more than 87 percent of non-prior service enlistees had a high school education or equivalent, and more than 93 percent tested in categories I-III on the Armed Forces Qualification Test. The overall improvement in the quality of "non-prior service" recruits since 1980 has been substantial, as shown in Table III.

TABLE III

Selected Reserve Enlistments (DoD)
Quality Indicators

	<u>Percent*</u> <u>High School</u> <u>Diploma</u> <u>Graduates</u>	<u>Percent**</u> <u>In AFQT</u> <u>Categories</u> <u>I-III</u>	<u>Total***</u> <u>Non-Prior</u> <u>Service</u> <u>Accessions</u>
Fiscal Year 1980	66	73	93,700
Fiscal Year 1990	93	93	88,900

* Includes equivalency certificate and diploma graduates as well as high school students who enlisted prior to their graduation and were expected to graduate.

** AFQT Categories I-III include enlistees who score average or above on the enlistment test.

*** Rounded to the nearest hundred.

The gains in quality are due to several factors. Perhaps the most important is the fact that Reservists are volunteers who make the sacrifices required of military service because they choose to do so. Another critical factor has been the assignment to the Reserve forces of modern equipment, broader peacetime operating responsibilities, and wartime missions in the context of the Total Force Policy. The combination of these factors, the establishment of the Montgomery GI Bill, the enhanced prestige of the Armed Forces generally in recent years, enlistment and reenlistment incentives, and the opportunity to engage in stimulating training, has attracted to the Reserve forces unusually intelligent and motivated officer and enlisted personnel.

On the basis of recent discussions with senior Reserve leaders and manpower experts, however, I continue to believe that it is premature to reach even tentative conclusions about the short-term impact of Operations DESERT SHIELD/DESERT STORM on the recruiting and retention of Reservists. I continue to be confident, however, about long-term prospects. The first several chapters of what I have described as the "book" on Operations DESERT SHIELD/DESERT STORM have already been written and are well known. These chapters reflect a rapid response to the nation's call to arms and outstanding performance. We are still writing the final chapter. If it is written as well as the first chapters, our future recruiting and retention challenges will likely be considerably less difficult than some observers have predicted. The final chapter must, however, reflect the fact that the Reservists who have been called to active duty see the

connection between their personal sacrifices and the needs of the nation. It is important that they be perceived to return home as the heroes they are and that they be returned home as soon as operational requirements permit.

The absence of clear trends in recruiting and retention is due in great part to the unique characteristics of Reserve recruiting. It also results from certain policy actions involving personnel that have been taken in connection with DESERT SHIELD/DESERT STORM and from certain other steps which have been taken to improve the readiness of Reserve units independent of the events in the Persian Gulf. Reserve recruiting is, for example, focused almost entirely on the requirements of particular units within relatively limited geographic areas. In the case of the Reserve components of the Army and Air Force, recruiting within particular units necessarily ceased when those units were activated. Recruiting to fill vacancies in a Reserve unit is very difficult when the unit has been activated along with all or most of its recruiting force.

The implementation of "stop-loss" policies within both the Active force and Reserve components has also played a role, since, as indicated in Table IV, six of every ten accessions into the Selected Reserve are individuals who have prior military service. The retention within the Active component of personnel who would otherwise have affiliated with a National Guard or Reserve unit upon being released from active duty has obviously had an impact on recruiting for Reserve units. This is particularly true for the Reserve components of the Army, since over

one-third of all enlisted personnel who leave the active Army are eligible for or required to perform continued service affiliation with either the Army National Guard or the Army Reserve.

TABLE IV

Reserve Component Enlisted Accessions
Fiscal Year 1990

	Percent Prior Service	Total Accessions
Army National Guard	53	76,600
Army Reserve	57	67,500
Naval Reserve	74	35,400
Marine Corps Reserve	34	11,800
Air National Guard	66	12,300
Air Force Reserve	81	11,900
TOTALS	59	215,500

Table IV also demonstrates the difficulty of assessing short-term recruiting trends within the Reserve components. The difficulty results from the fact that the personnel requirements for each Reserve component are very different in terms of the need for individuals with prior service, the range and complexity of particular military skills which are required, and the optimal career force content of each Reserve component.

The Department of Defense will continue to devote considerable resources to Reserve recruiting. Table V identifies recruiting resources by Reserve component for Fiscal Years 1990 through 1993.

TABLE V

Recruiting Resources by Reserve Component
(Current \$ in Millions)

Component	Actual FY 1990	Programmed FY 1991	Budget FY 1992	Budget FY 1993
Army National Guard	260.0	272.1	255.5	239.2
Army Reserve	214.2	237.8	224.5	200.0
Naval Reserve	90.4	90.4	82.7	81.9
Marine Corps Reserve*	20.6	20.8	20.6	21.0
Air National Guard	47.4	46.2	47.2	47.6
Air Force Reserve	33.7	32.2	33.5	35.2
Joint Adv.	<u>2.1</u>	<u>1.0</u>	<u>.8</u>	<u>.6</u>
TOTALS	668.4	700.5	664.8	625.5

* Does not include resources (estimated \$30.2 million annually) reflected in Active Budget for recruiting of approximately 7,800 NPS personnel.

Educational assistance under the Montgomery GI Bill, which requires an obligated term of service of at least six years in the Selected Reserve, is particularly important. One measure of the value of this legislation is its effect on the number of six-year enlistments. Since the inception of the program, accessions committing to six-year or greater terms of service have steadily increased. The proportion of new accessions (non-prior service) electing six-year terms has increased from 39 percent in Fiscal Year 1985 to 68 percent in Fiscal Year 1990. While other enlistment bonuses and general economic conditions have contributed to this success, there is no doubt that the Montgomery GI Bill is a significant factor. At the end of FY 1990, 45 percent of all members eligible for educational assistance had actually applied for the benefits. This is up from 39 percent at the end of FY 1989.

The Montgomery GI Bill for the Selected Reserve is unique for two reasons. First, it provides benefits to participants before their required service is completed so long as they have completed initial training. Second, the program is available to all Reservists who agree to serve for six years, and not just to new enlistees. Program administration is shared by the Department of Defense and the Department of Veterans Affairs.

Because of the complexity of program administration associated with the provision of educational assistance to all National Guardsmen and Reservists, continued emphasis has been placed on improving administrative procedures and automated systems. While emphasis has been on accuracy and efficiency in providing benefits to members who are participating satisfactorily, DoD has also developed initial procedures for implementing recoupment procedures for members who have not participated satisfactorily.

Table VI compares program eligibles to participants for Fiscal Years 1989 and 1990. The percentage of eligibles actually applying for educational assistance increased in all components during the past year.

TABLE VI

Montgomery GI Bill-Selected Reserve
Percentage of Applicants to Eligibles
(As of September 30, 1990)

<u>Reserve Component</u>	<u>Eligibles</u>	<u>Applicants</u>	<u>Percentage of Participation</u>	
			<u>FY 90</u>	<u>FY 89</u>
Army National Guard	196,031	78,287	40.0	34.5
Army Reserve	84,714	48,716	57.5	53.0
Naval Reserve	42,279	20,753	49.1	43.2
Marine Corps Reserve	23,709	14,116	59.5	55.2
Air National Guard	55,454	22,440	40.5	38.0
Air Force Reserve	39,236	13,284	33.9	29.8
Coast Guard Reserve	<u>4,106</u>	<u>1,546</u>	<u>37.7</u>	<u>30.9</u>
Total Selected Reserve	445,529	199,142	44.7	39.7

The Montgomery GI Bill has proven to be particularly attractive to high school graduates interested in pursuing their education. Eighty-eight percent of the enlisted participants are under age 30, while only sixty-five percent of all enlisted members are under age 30. Fifty-four percent of the participants are under age 22. Eighty-seven percent of the total Selected Reserve population is male and thirteen percent female as compared to a Montgomery GI Bill program distribution of eighty-one percent male and nineteen percent female. Of the total female Selected Reserve population, twenty-three percent are applicants. Table VII identifies the benefit level of participants by Reserve component.

TABLE VII

Montgomery GI Bill-Selected Reserve
Level of Individual Participation by Component

<u>Reserve Component</u>	<u>Full-Time</u>	<u>3/4 Time</u>	<u>1/2 Time</u>	<u>Percentage Full or 3/4</u>
Army National Guard	37,703	6,113	6,752	86.6
Army Reserve	20,837	3,794	4,319	85.1
Naval Reserve	8,398	1,917	2,562	80.1
Marine Corps Reserve	7,657	1,420	1,173	88.6
Air National Guard	9,858	2,267	3,803	76.1
Air Force Reserve	<u>4,422</u>	<u>1,437</u>	<u>2,425</u>	<u>70.7</u>
Total Selected Reserve*	88,875	16,948	21,034	83.4

*Participants receiving benefits while attending on a less than half time basis are not shown. Eligibility for less than half time study began in November 1988. The Coast Guard Reserve is not included due to the extent of missing data on level of participants.

Assistance for vocational/technical programs was added to the Selected Reserve program on October 1, 1990. The programs which are eligible for assistance include: (a) apprenticeship training and other on-the-job training, (b) cooperative study programs, (c) approved correspondence courses, (d) refresher, remedial, and deficiency training, (e) work study assistance, and (f) a test flight training program. In order to receive assistance for these benefits, an individual must enlist, reenlist, or extend his service obligation for six years on or after October 1, 1990.

The annual cost of the GI Bill program for Fiscal Years 1985 through Fiscal Year 1993, is reflected in Table VIII.

TABLE VIII

Montgomery GI Bill-Selected Reserve
Annual Obligations
(\$ in Millions)

<u>Actual</u>			<u>Estimate</u>	<u>Budget</u>	
<u>FY 1985</u>	<u>FY 1989</u>	<u>FY 1990</u>	<u>FY 1991</u>	<u>FY 1992</u>	<u>FY 1993</u>
<u>\$19.9</u>	<u>\$81.6</u>	<u>\$78.1</u>	<u>\$94.9</u>	<u>\$80.4</u>	<u>\$77.7</u>

In July 1990, the DoD Education Benefits Board of Actuaries reevaluated the per capita normal costs charged to the Services. Based upon a new population model and revised participation rates, the estimated obligations to the Education Benefits Fund for Fiscal Year 1990 and beyond were adjusted.

In the separate written statement that I have submitted in connection with this hearing, I have described several initiatives that have been taken in recent months to build support for Reservists by both their civilian employers and their communities. I have also noted there the major legislative proposal entitled the "Uniformed Services Reemployment Rights Act of 1991," which was submitted for your consideration on February 21. It will update, clarify and strengthen reemployment assistance for persons after service in the uniformed services and encourage active participation in the Reserve components. It has been introduced as H.R. 1578 and reported out of the Subcommittee on Education, Training and Employment. I strongly endorse and recommend passage of this piece of legislation which my office has worked on for almost three years.

While it would be unwise to establish new policies based on speculation about future trends in recruiting and retention, there are identifiable factors that will almost certainly affect the decisions of potential Reservists to join, and current Reservists to remain in or to leave, the Reserve forces. I refer first to the reactions of the civilian employers and families of the Reservists who have been called. Beyond that, I am referring to the general reception accorded Reservists when they return home.

The Department of Defense does not, of course, have the ability to control all aspects of the reception that Reservists will receive when they return to their civilian communities after their active military service. To the extent that the Department can affect other aspects of that reception, however, it is important that we do so.

We are also exploring other possible policy and/or legislative initiatives that will increase the likelihood that returning Reservists see a direct connection between their active service and the needs of the nation; feel positive about their service; receive appropriate recognition of that service; and perceive clear reasons for continuing their service in the Reserve components. As I said earlier, the final chapter of the "book" on DESERT STORM has not yet been completely written, but the Department of Defense will continue its energetic search for ways to match in the future, its history of success in attracting to the Reserve components, the high quality men and women who serve today.

In closing, I would like to express appreciation on behalf of all members of the National Guard and Reserve who served and are serving in support of Operations DESERT SHIELD/ STORM, and on behalf of their families, for the very substantial compensation improvements, additional protection, veterans' benefits, and transition benefits which the Congress adopted in the National Defense Authorization Act for Fiscal Year 1991, the Soldiers' and Sailors' Civil Relief Act Amendments of 1991, and the Persian Gulf Conflict Supplemental Authorization and Personnel Benefits Act of 1991. A description of all of these benefits is included in our recently published pamphlet, "Released from Active Duty--What Now?". Your actions have sent a very strong message about the Nation's concern for and support of, its Reserve forces.

The CHAIRMAN. Thank you very much, all of you.

Let me start out with questions to see just what the statistics are and what the general level of agreement is. What is it we are looking toward in the next few years? Is it out to about 1994 where the cohort of the relevant age group gets smaller, and then it turns around after about 1994? But fortuitously, it happens to coincide, for other reasons totally unrelated, to the size of the forces drawing down. So those are two major changes that are taking place, and they operate together in the sense that the cohort is getting smaller but the force will also get smaller.

The other big factor, of course, is what we see as the Desert Shield/Desert Storm impact and what that impact will have on future recruiting.

What at this point do the statistics show as to the effect of the war? Is it too early to tell? What do the numbers show?

I remember seeing numbers that said that the volunteers were down a bit in October and November which you think was due to the impending war which was not for sure, but looking as if it might happen. But then it seems to me—I remember reading somewhere—that they turned around and went back up in December and January, which seemed to be contrary to what you would think. As the war actually got closer, the recruitment went back up. I don't know what the numbers are for February or March. Do we have March numbers?

Mr. Jehn, what has actually happened on the recruitment for the all-volunteer force over the last 6 months? What are the numbers showing?

Mr. JEHN. You have laid it out exactly right. First off, for the last 6 months the numbers show that the services, collectively and individually, all met at least 100 percent of the recruiting goals. That is, they delivered to the services' training establishments 100 percent of the people that they were expected to deliver, the new recruits.

But I think the way you have just described the pattern over the last 6 months is exactly right. I think the possibility of impending conflict, the uncertainty regarding the duration and intensity of that conflict, and so on, in September and October resulted in what we characterize as the potential recruits take a "wait and see" kind of attitude, and perhaps it is even more accurately portrayed as a "wait and see" attitude on the part of their parents and other influencers, as we call them, the folks that are in a position to advise and counsel young men and women about whether to join the military.

I think each of the recruiting services adjusted to that change in attitude during the period September, October, and into November, and by December the adjustment was pretty complete.

I think that is a good question to ask the service recruiting chiefs you will be seeing later.

The CHAIRMAN. How they adjusted and what they did different?

Mr. JEHN. That is right, in terms of their marketing strategy, if you will.

For example, because of the greater concern on the part of parents and influencers, the recruiters found that they needed to get in and talk to parents and other counselors and so on much sooner

in the process, so that the young man or woman might not come home and tell his mom, "The Army thinks I'm great and would make a great soldier, and I want to enlist tomorrow," and the mother says, "Well, I can imagine what he has been telling you. Let me talk to him now." They found that what they really needed to do was get in and talk to parents much earlier in the process.

I think also they discovered that they were able to more effectively focus on young men and women who had already graduated from high school, who were out seeing the difficulties perhaps that getting ahead in the civilian world presented without a skill or much more education than a high school diploma.

So those kinds of adjustments were made and were made successfully by the services so that recruiting, I think, improved markedly in December and January.

Once hostilities started, the report I have heard is that there was a great deal more interest on the part of America's youth in military service, and that should not have come as a surprise to any of us. There was an increase in enlistments at the outbreak of every major crisis and war we have had since Korea, including the Vietnam War, at least initially.

So that what we have seen is probably not all that surprising, and I think all the services are very optimistic that they will make all of their 1991 recruiting goals. I think a term General Thurman used is a very apt one. We have got a lot of confounding influences, though. We have cut recruiting resources; we have got the continuing decline of the population pool to confront; we have got the uncertain effects long-term of the Persian Gulf war, the long-term effects, uncertainty, surrounding the effect on youth propensity of the draw-down in the military, where a lot of young men and women who might otherwise have enlisted decide that now it is not nearly as attractive a career as it might have otherwise been. We don't know the answers to those questions, so in a sense it is too early to tell what the separate effects of any one of these individual factors is, and certainly it is much too early to tell what the long-term effects of Desert Shield and Desert Storm will be.

The CHAIRMAN. Thank you.

Let me just run through it again and see if I have it. Basically, what you are saying is, at the beginning of the conflict there was a lot of uncertainty, and recruiting numbers were down in September, October, and November. The increase in the numbers in December and January you think is essentially attributed to a change in the recruiting, or the way they were recruited. That is interesting to know.

Then, of course, when the war started, you had a surge of patriotism, which you say is typical of all wars. Presumably, now there is a pop in recruiting as a result of a successful war. There is now very fertile ground to go out and do some recruiting. Now the question is, how long does that last over time? We don't know.

Does that sort of summarize it?

Mr. JEHN. Yes.

The CHAIRMAN. What are you talking about when you say you were short 18,000 of the sign-ups. Are you talking about the delayed entry pool?

General THURMAN. The measure of performance of a recruiter is getting the enlistee to sign a contract. That is the actual work done. When you bring him or her into the service is when the training base is ready to accommodate them.

The CHAIRMAN. Right.

General THURMAN. My barometer in determining how is it going is, how are you doing on contract writing? Now I agree with the secretary that the accessions have met all the goals and they are a very rich bunch of accessions, but I would suggest to you that one of the things you want to watch is, what is the contract write rate, and the contract write rate at the moment is 18,000 in the case of the Army behind last year, and the daily write rate, even what is going on today, comparable to March and April of last year is below March and April of last year even at this time. So it is something to be watchful about.

So I would suggest that you want to look at contracts, because that is going to tell you how many people are going to be ready to go in the delayed entry pool as we go over September 30, 1991.

The CHAIRMAN. What has the pattern been on the daily write rate?

General THURMAN. How many a day?

The CHAIRMAN. No, I'm not talking about that. But compared to previous years, how has it been affected by Desert Shield/Desert Storm?

General THURMAN. It is affected by the fact that you have to see more people. For example, I indicated you have got to see 12 people to get one to enlist. Before, you only saw about eight and a half people to get one to enlist.

The CHAIRMAN. So now you have to see more.

General THURMAN. You have to see more people, you have to make more contact, you have got to see more influencers—the parents—in order to get one person to enlist, and that is true up until March. What is going on in April Jack Wheeler can attest to a little bit later on.

But my point about that is, there is a “watch and wait” phenomenon going on which says, “We’ll see how it’s going.” Meanwhile, Jack is getting everybody pulled forward into the delayed entry program to fill up the training seats and get them ready for combat, and that is a perfectly legitimate process to go on.

The CHAIRMAN. Max, what was the daily write rate compared to previous years at this time? In other words, if you go back and say, OK, Desert Shield started in August and Desert Storm started in January, how does that compare? What did you see as the impact of, first, Desert Shield and then Desert Storm on the daily contract writing rate?

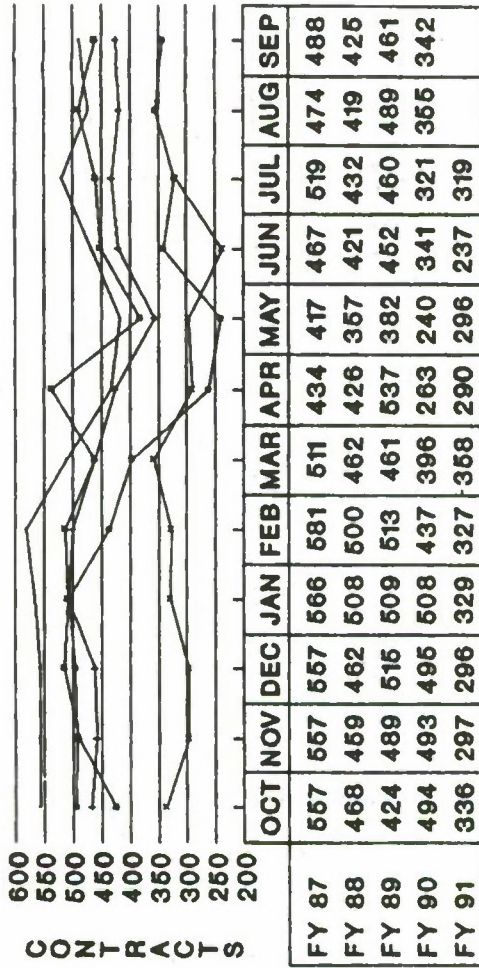
General THURMAN. I have got a write rate contract we will show you over the last 5 years, and I could make it part of the record for you.

The CHAIRMAN. Please do that.

[The following information was received for the record:]

COMMAND VOLUME WRITE RATES

Total Contracts Written

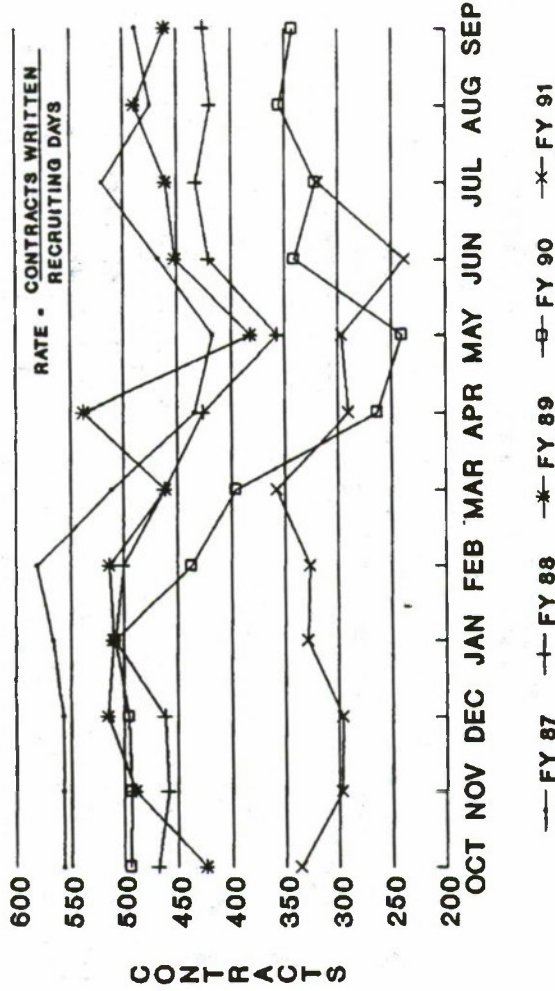


— FY 87 — FY 88 — FY 89 — FY 90 — FY 91

volwr

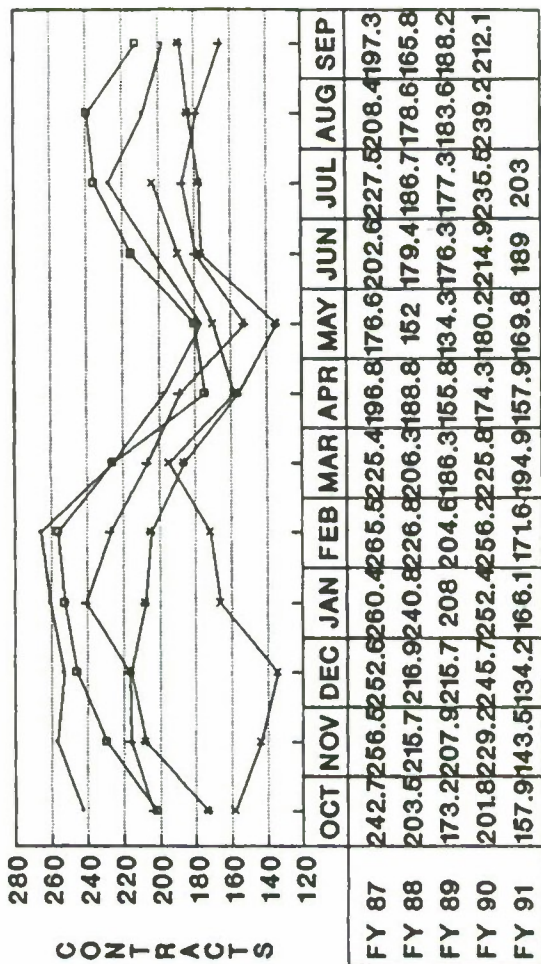
COMMAND VOLUME WRITE RATES

Total Contracts Written



volwr1

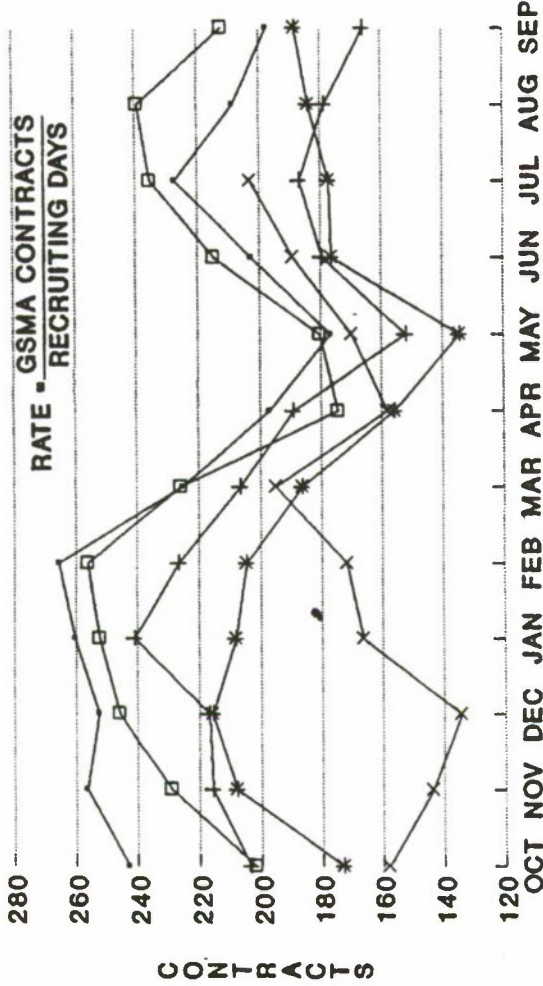
COMMAND GSMA WRITE RATES



—●— FY 87 —■— FY 88 —▲— FY 89 —×— FY 90 —*— FY 91

GSM/WR

COMMAND GSMA WRITE RATES



—•— FY 87 —+— FY 88 —*— FY 89 —x— FY 90 —x— FY 91

GSMA: High School Diploma Grad or Senior scoring in upper 50th percentile of Armed Forces Qual Test: AFQT I-III

gemawr1

The CHAIRMAN. But, basically, what is the moral of the story here?

General THURMAN. The moral of the story is that when tension comes up you are going to have more caution about enlistment, and therefore the write rates are going to fall. It is just that simple.

Now if you went into a recruiting station today and tried to get into the Infantry or to the Armor or to the Airborne or to the Rangers, you can't get into those at the moment, and that comes from the euphoria side of saying, "Well, if combat is really going to ensue, then sign me up and give me the most arduous service." I think that is a fair statement from the Army's side of it. So once the combat starts, people are going to come forward in a spirit of patriotism and sign up.

It is the fear of the unknown that will cause it to slump off in the period of tension. Once the combat ensues, it will start taking off again. But we still have not achieved last year's contract write rate.

The CHAIRMAN. So why shouldn't we be doing better on the contract write rate now, given the fact that we have just had a successful war, low casualties, and everyone is a hero? Why isn't that showing up in the daily write rate?

General THURMAN. Well, I would think it has turned about in April. It turned about in March and April. So at the conclusion of the war it began to go upward. It has not achieved last year's level yet.

The CHAIRMAN. OK.

Steve Duncan, tell me what your guess is in terms of the impact of all of this. What are the comparable statistics on the Reserves?

Mr. DUNCAN. We also don't see any clear pattern developing. I just met with the Reserve chiefs this week and went through the data again. Generally, it kind of reflects various factors. We are cautiously optimistic about where we are now.

We have some unusual factors we deal with that are different than those that affect the Active Forces. For example, the Reserve Forces recruit, as the chairman knows, primarily within a limited geographical area for the Reserve units in that area, as opposed to going nationwide for a particular unit. So that will vary. That is a complicating factor. Then the "stop loss" policy that we instituted affected it, since something like 60 percent of our people are prior service people coming off Active Duty. So that is a factor. So, there are many kinds of factors that are playing a role here. It is hard for me to discern exactly what is going on, but I am cautiously optimistic for the short term.

The CHAIRMAN. It is harder to figure out in the Reserves than it is in the active. Isn't that because of stop loss and units being deployed?

Mr. DUNCAN. There are just more factors at work sometimes.

The CHAIRMAN. What is your guess? What is the impact of this on Reserve or Guard personnel? Based on your experience in this business, what are you guessing—that people join the Guard and Reserve, in fact, for the education benefits, et cetera, but discover all of a sudden an enormous inconvenience when they actually were deployed?

Mr. DUNCAN. I get nervous, Mr. Chairman, with broad generalities. Certainly you can't treat the youngster who joins the Army National Guard the same way as you treat the guy who came off active duty as an experienced F-16 pilot and joined the Air National Guard. They are both National Guard, but you are talking about different reasons, different motivations. Obviously, a more experienced person may have different motivations.

My own general sense—having said that I don't like to generalize—is that people come into the Reserve forces because they want to remain associated with the armed forces in some way that is, the people who had previously served on active duty. They also have civilian careers.

I think there are an awful lot of positive things going on right now in the minds of reservists from the standpoint that the Government, the United States, their country, called them up; they trained them; they relied upon them. The reservists performed well, people recognized that they performed well, and so forth.

Now when you get down to individual circumstances, it may vary, and if we talk about particular skills within particular services I don't know. But, as a broad general statement, I think the last few months have been very positive for the Reserve forces because a lot of people now realize, "My goodness, this Total Force thing really does work; they really do perform."

The CHAIRMAN. I have one last question for all of you, and, again, ask your judgment on this. What does this tell us about the ability of the all-volunteer force to provide manpower for a long war? I mean this was a short war, it worked, it was very successful, and the volunteers were there. What would it tell you if suppose this war had gone on for 6 months or longer with more casualties? Can you make any sense of the experience of the recruiting here to make any judgment about that?

Mr. JEHN. My conclusion certainly would be cautious optimism, that we saw the service recruiting commands, for instance, able to make adjustments in the face of a changed attitude on the part of potential recruits, and I think we saw nothing that would suggest that conscription is something we would need to turn to in the event of a longer war.

Obviously, again, I would echo what Secretary Duncan said: Absolutes in this business are really dangerous.

The CHAIRMAN. But you essentially—

Mr. JEHN. I feel very good about it, yes, sir.

The CHAIRMAN. Because it has always been assumed that perhaps you would have to go back to a draft if needed. The volunteer Army was, of course, there for the initial stages of a war, but always in the background, is the possibility of a return to the draft.

Max, what does this tell you about the ability of an all-volunteer Army to continue to supply the manpower if we had a longer war with more casualties than we had in Desert Storm?

General THURMAN. When you say "longer," you mean 6 months.

The CHAIRMAN. Yes.

General THURMAN. That is long, and then longer—if it is a really long time, you are going to have to go back to the draft.

But I believe that the current system will support activities through a longer period of 6 months or so. We only began—I be-

lieve, Steve, you can correct me on this, but we only began to touch the first year's worth of IRR, so we called up only 20,000 people in the Individual Ready Reserve. In my own view, I believe that should be part of the 200,000 call-up authority, so that you get that started earlier, but you have quite a rich IRR left to go.

I think one of the things that the committee needs to observe is the long-term implication of the reduction in the Active and Reserve against the 1995 ceilings as to how many people will be in the IRR in the year 2000, 2005, because obviously it is a feeder program that starts by original service in the active or in the Reserves, and so there may have to be some stimuli that are placed in the IRR.

If you take Mr. Murtha's bill which was put up as a test on the 2 plus 2 plus 4, which began to put people in the active and then bring them along into the selected Reserve, I think those are the innovative kinds of programs that will have to be put into place in order to assure the right numbers of people for both the Guard and Reserve in the long haul.

The CHAIRMAN. Beverly Byron.

Mrs. BYRON. Thank you, Mr. Chairman.

Let me pursue a number of questions.

First of all, I am delighted to see the number of young students who are in the audience today, because I have been speaking to an enormous number of high schools in my district, and the question that was always asked of me all fall and early this year was, "Are we going to have a draft again?" My answer to each and every one of those young people has been no, and I hear this great sigh of relief. I then follow it up with the fact that a few of the good students in this class I probably will find volunteering to put on a uniform and go to serve their country. Then I see some smiles on their faces. I think we have learned that the individuals who do come and volunteer are by far those who are much more committed.

General Thurman, we on the subcommittee had an enormous amount of information gathered from Operation Just Cause, information that we put into legislation which was then in place for Desert Storm and Desert Shield.

Secretary Duncan and Secretary Jehn know very well the difficulty we are having cutting back our total force—cutting back the numbers 25 percent over a 5-year period, one-for-one Active Duty Guard and Reserve. My feeling and, I think, the feeling of the subcommittee is that the quality we have today is so very important, and a lot of that quality stems from innovative programs we initiated to take care of the total family. Individuals have told us again and again, "I will go wherever you send me if I am assured that my family is going to be taken care of."

So it seems to me when we are in a budget crunch, as we are now, it is extremely important that we keep family issues and programs that we already have in place. I think the strong feeling on the subcommittee is that issues we have addressed, family issues, are going to be the ones to stay, PCS costs, et cetera.

Having said that, we must now look at drawing down. We are now, in my estimation, at an extremely critical point with our Guard and our Reserve. These individuals left their home communities and traveled half a world away, wearing the uniform, and

serving with a great deal of pride. At the same time, their employers at home, and their families, understand as long as there is a war going on. But right now, their understanding is beginning to wane a little bit as to the necessity for some of these Guard and Reserve people to still be on active duty.

We have seen a change in the economy in this country. We have the Soldiers and Sailors Civil Relief Act of 1976 which mandates that a service member's job will be there when he or she returns from active duty. Whether these people will be around for the long haul is going to depend heavily on how we manage and how they are received back into their community once they come off Active Duty.

We have individuals who, all of a sudden, become conscientious objectors—these same individuals who raised their hands, who put on a uniform to uphold their Nation, and then say, "Hey, wait a minute; I didn't know I was going to be deployed; I didn't know I was going to have to go to war."

So we will learn from this. We will find single parents who said, "I didn't know you were going to send me away. I liked it as long as I was at home drilling during the weekends and over the summer."

I don't need to talk to the two secretaries on the issues of new mothers; we had a 6-hour hearing on that issue. We are looking at, as we draw down, the 11 to 12 percent of females we have in the service today. We have already addressed females in combat. All of these issues are going to have an impact on our recruitment and on our long term all-volunteer force.

Can you give me, Secretary Jehn, an assessment on what you think is the most critical issue as we draw down? If we draw down one for one or if we keep the numbers high and eliminate some of the programs we have put into place, what is the bottom line that we should look at? Because, as you know, we have a mandated dollar figure we have got to come in under, and personnel is a very, very difficult issue to put under those dollar figures.

Mr. JEHN. As you noted, Mrs. Byron, the personnel accounts consume a very large portion of the defense budget, and I think that is an accurate reflection of the importance people have to our national defense effort.

What do we look at as the draw-down proceeds to make sure that the personnel accounts are doing their job, as it were, that we are spending our money effectively? I think, first and foremost, we look at the kinds of figures and statistics we have talked about this morning, our retention figures, our recruiting figures. We need to be alert to any anecdotal or nonsystematic evidence that we are losing the battle to convince people to either join the military or to convince those quality folks we already have in to stay in.

So the kinds of things General Thurman and I both mentioned and Mr. Duncan did as well, I think, are the things we need to protect—pay and allowances, quality of life, training—we need to keep promotion flows moving, and all of that speaks to the importance of doing this force reduction that we are facing in an intelligent and balanced way, things we have all talked about before.

Mr. SKELTON. Would the gentlelady yield at that point?

Mrs. BYRON. I will for a moment, but then I have two more questions I want to pursue.

Mr. SKELTON. Then go ahead and ask them. I will ask mine later.

Mrs. BYRON. General Thurman, when you were talking about 18,000 contract youths that we are behind right now, how does that track with the numbers and our objectives on the total force numbers at the end of this year? Is it a number that would fit into the draw-down numbers, or is it a number that we should be concerned about?

General THURMAN. No, it doesn't apply to the draw-down number, because the 18,000 is a measure of merit of looking at how is daily progress going on in the street out there.

Mrs. BYRON. I understand that, but our objective is to draw down our total force. So does that number fit in with the total force?

General THURMAN. No. The 85,000 for the year for Army recruiting, that does take into consideration the draw-down to get to 660,000 next year, for example, and onward to 535,000 in 1995.

Mrs. BYRON. My other question is: you were talking about 1 in 8 enlisting, and now it is 1 in 12. Is this partly because we are now able to be more selective because of the lack of category fours, and the subsequent increase in quality—is this the reason why the military today can be much more selective?

General THURMAN. I think part of that is attributable to it. Also, the fact is, the recruiter, though, when he does his original screening, screens out many of the lower qualified people to start with. But there could be some effect on the 12.

Mr. SKELTON. Would the gentlelady yield at that point?

Mrs. BYRON. Mr. Skelton.

Mr. DICKINSON. Mr. Chairman, can we go in the regular order, because I have to leave? I have one question to ask.

The CHAIRMAN. Beverly, finish your questions, and then Bill Dickinson is next.

Mrs. BYRON. I'm through, Mr. Chairman.

The CHAIRMAN. Bill Dickinson.

Mr. DICKINSON. Thank you.

Just a quick one, just an observation. You were talking about the new mothers. That had nothing to do with the "Love Boat" article yesterday, did it, where 10 percent of the female sailors got pregnant on the way over to the Persian Gulf?

Mrs. BYRON. Mr. Dickinson, we had a 6½-hour hearing on it a month ago.

Mr. DICKINSON. That was before it happened.

Mrs. BYRON. I'm not sure.

Mr. DICKINSON. OK.

One question, and I don't know who can best respond to this. Since we don't deal with this on a regular basis, I am really uninformed, and I am asking for information. There was a time when the FCC required a donation of public service time by television and the media; my recollection is that the services could chip in and get some free advertising. I don't think the services get any free advertising now, and I think they are really paying through the nose.

We wrote some legislation that said, in running for public office—Federal public office anyway—the candidate should not be

gouged but pay the lowest commercial rate. I know we will get into this this afternoon also, can someone tell me what is the situation now? I know there is a big budget. Is there any contribution from industry?

Mr. JEHN. Oh, very much so. We still get public service advertising. Indeed, the Air Force advertisements you might see on television are all public service advertising. The Air Force isn't buying any time on television, for example, and some of the advertising you see for all the other services is also public service advertising.

You are quite right; we spend a lot of money on TV and radio and major print media advertising, but we also get public service assistance as well. What the exact break of that is I can't tell you today.

Mr. DICKINSON. Mr. Secretary, if the industry is doing this, they should get recognition—we should tip our hat to them, and this is good. I was not aware of it; that is the reason I asked the question.

Mr. DUNCAN. Let me add a comment from the Guard and Reserve standpoint. We have a major effort that has been made by the Advertising Council over the last couple of years in connection with our message to civilian employers all over the Nation. The theme then has been, "Give your employees the freedom to protect ours," and there are several good ads, on television, in the print media, and on billboards across the Nation. It has been a major and a very successful effort, in our opinion. That is public service advertising.

Mr. DICKINSON. At no cost to the services to help in this effort.

Well, thank you, Mr. Chairman. That was the one question I wanted to ask.

The CHAIRMAN. Herb Bateman.

Mr. BATEMAN. Thank you, Mr. Chairman.

I don't have the numbers in front of me, but we are looking at very sizable reductions in end strengths for all branches of the service, the larger number being the Army. I have had a concern that, given the build-up and the calling to active duty of reservists during Desert Shield/Desert Storm that it would be very difficult for the services to get back on track for the draw-down that was originally contemplated last year when we passed the authorization bill.

I have been asking questions of witnesses as they have appeared before the committee throughout the year, and I am going to ask, I guess, probably the last and final time this morning: Can you make those reductions without the involuntary separation of good, fully competent personnel without doing something to morale and thereby to retention and even to accessions?

Mr. JEHN. As you know, our fiscal year 1991 end strengths will be a bit higher than were originally programmed, and that is directly the result of Operation Desert Shield and Desert Storm. By the end of fiscal year 1992, we can reach the end strengths we proposed in the President's budget, and those numbers, by the way, that we have proposed were derived in large measure on the basis of estimates we think we can achieve without significant numbers of involuntary separations. So we are very comfortable with those numbers, and, because of the relatively rapid conclusion of the war

effort in the Persian Gulf, we don't feel we need to adjust those at this time.

We have already given the services direction and guidance on what their end strengths for fiscal year 1991 ought to be, and, as you know, they are about, on average, 1 percent higher than what they had originally been budgeted to be, and we think we will be back on track—we will be back on track by the end of fiscal year 1992.

Mr. BATEMAN. OK. My next area of inquiry is again with reference to the proposed end strength reductions. You have done the total force study or analysis that Congress requested; you have furnished us with that report. We now have the proposed budget and the end strength reductions that are reflected in it; it reflects end strength reductions in both Active Duty and in Reserve forces.

Would you tell me whether or not the budget as submitted is founded on the results of your total force study, what lessons are learned from it, and if you were to adjust and take down more in active duty and less in reserves, what would you be doing to the implementation of the total force study and the analysis that followed from it?

Mr. JEHN. Yes, sir. Let me just directly comment on that. I am sure Mr. Duncan would like to add a few words as well.

I, as you know, as the chairman of the study effort you have just referred to, the total force policy study—Mr. Duncan was the vice chairman of that effort, and it was an effort that consumed the efforts and the work of a large number of people in the Pentagon during calendar year 1990, and let me assure you that the results of that study, the things we learned in the course of that study, were very much considered in the process of putting together the budget proposal that is before you right now.

We had, for example, two very lengthy sessions on the question of Reserve and Active mix, sessions before the Defense Planning and Resources Board, that both the Secretary and the deputy secretary attended.

The budget we have got before you right now for fiscal year 1992 and the plan that it reflects that carries on well beyond fiscal year 1992 is the Department's best judgment about the correct balance of Active and Reserve forces but also, I might add, civilians, contractor support, host nation support, all those other components of the total force.

Steve.

Mr. DUNCAN. About the only thing I would add would be to note that there is a little bit of confusion because the final report of the Total Force Policy Study Group was not submitted to the Congress or was not required to be submitted until December.

So, at first blush, you would say, "Well, how did that have an impact on a budget that was submitted the following month?" But, as Mr. Jehn points out, all through calendar year 1990, as we were conducting and engaging in the Total Force Policy Study we were simultaneously meeting with the Secretary and the Defense Planning and Resources Board going about the Department's normal budgetary and planning objectives as we were even developing the new military strategy that the chairman and the Secretary have talked about.

So yes, there was a direct relationship and it tied together but perhaps not as—it is not as immediately apparent, but it certainly did.

Mr. BATEMAN. General Thurman, could you give me your reactions to whether or not you feel the proposed draw-downs relative to Active Duty and Reserves are in balance or whether or not they may be out of whack to a degree in one component or the other?

General THURMAN. Let me just suggest to you that my view is, they are in relative balance. I haven't done the detailed work, obviously, these two gentlemen are responsible for, but, as a rule of thumb, a division is roughly 40,000 people looking at both its active component and its Reserve, Guard, supporting elements. It is about a 50/50 proposition, 50 percent in the active and 50 percent in the Guard/Reserve. So you are taking essentially 10 divisions out, and so 10 times 20,000 is about 200,000 Guardsmen and reservists who should fall out of the structure based upon taking the total force from 28 divisions down to 18 divisions. It is about right.

Mr. SKELTON. Would the gentleman yield at that moment on this particular issue?

Mr. BATEMAN. Surely.

Mr. SKELTON. There are advocates, General, who would draw down the active duty more and the Reserve components—Guard and Reserve—less. Should that come to pass, what would happen, and what would be the impact on our national defense?

General THURMAN. My view is that the force structure which the Secretary of Defense has proposed in concert with the chairman of the Joint Chiefs of Staff, he has reported to you that it is 12 active divisions, six Reserve divisions, and two cadre divisions necessary to support the strategy which they envision for the future, and I am certainly not in a position to second guess that. So my view would be that the structure that he has proposed both in the active component and the Guard and Reserve are about right.

Mr. BATEMAN. Just to follow up and to make sure that the point is completely made, you see no indication here of a mind set or propensity to protect active duty at the expense of Guard and Reserve?

General THURMAN. No, I don't see the propensity to do just what you said. I think that, at least from my understanding of both the Secretary of Defense and the chairman's views, you have to protect, as you look in the future, a contingency situation with Europe, let's say, being the biggest contingency, but everything is a contingency situation, and with the movement of most of the active component forces back to the United States shores, then you have to be in a position to project power anywhere in the world on short notice. So I think that the balance that is struck is the correct balance.

The CHAIRMAN. Martin Lancaster.

Mr. LANCASTER. Thank you, Mr. Chairman. Thank you, gentlemen.

Many of our reservists—in fact, I think almost all of them—and their families are justly proud of the role they played in Desert Storm, especially those who did deploy. But also many of those reservists who are still in Saudi Arabia, who now are not working in their fields of expertise and training—in many cases are doing

busy work—who are simply waiting for their plane to come pick them up, are becoming very dissatisfied.

The Army, I think, is wrong in their slavish adherence to "first in/first out," and I think all of this is going to have an impact on retention. It certainly has had a significant impact on morale. I wonder if you folks would care to comment on the policy now of keeping some reservists there after they have finished their work until their "first in/first out" turn comes to get a ride back home.

Mr. JEHN. I will just comment very briefly.

I think there is a great deal of confusion concerning this "first in/first out" policy. The first criterion on which judgments are made as to which units come back and so on are the needs of the commander in chief and the force in Saudi Arabia.

I can't comment on any individual unit, whether it ought to be back sooner or later than it is coming back, but——

Mr. LANCASTER. Excuse me, Mr. Secretary.

After our visit to Saudi Arabia 2 weekends ago, we were given a schedule of return, and that schedule was a slavish adherence to "first in/first out." There was no adjustment made based on expertise or field of training or needs of the service. It was a straight, the day they came in is now the date they will go out. So while someone in the Department may be mouthing some support for a reasoned and intelligent decision based on the needs of the service, that is not what the Army has published at our request since we have returned.

Mr. JEHN. Well, I would certainly like to talk to you further about it. I don't have all the schedules and so on in front of me, but I think the point I was simply making was that the decision about which units come out is based on a variety of factors. My understanding, though, is that units that are equal—are considered equally valuable or essential to the effort or no longer needed over there, then factors like "first in/first out" and whether the individuals have been involuntarily recalled and so on are considered. The extent to which that is done perfectly or there is slavish, as you put it, adherence to some rule of thumb I really can't comment on right now, and I think it certainly merits attention.

Mrs. BYRON. Would the gentleman yield?

It is my understanding—and we have seen this documented on the list that has finally been published—that in many cases when an active duty unit was deployed and a Reserve or Guard unit was deployed in conjunction with that unit, the Reserve and Guard unit are still sitting there and the active duty unit is home.

Mr. LANCASTER. Hear, hear, Madam Chairman.

That is true, Madam Chairman. I thank you for raising that point.

In my opinion, it is the same as when we have businesses failing and crops not planted, the Army is really creating a very, very serious problem for their Reserve retention and recruitment. Until the Army gets their act together and starts bringing those Reserve and Guard forces home ahead of equal and similar active duty units, they are going to continue to have a problem.

Mr. DUNCAN. Mr. Chairman, could I make one comment on that I think needs to be made? This does not answer all of the question, and none of us would subscribe or endorse a policy that is obvious-

ly unfair. But it is a fact that many people don't understand that in the case of the Army Reserve components we are talking something like 70 percent of the Army's combat support and combat service support elements, the logistical units that are required to bring all of that military force home, are in its Reserve components. It is a matter of conscious choice that many of the active units are perhaps disproportionately in number in combat units, and many of the Reserve component units are disproportionately support units. Those logisticians and the water purifiers, the civil affairs units, and the transportation companies, those are precisely the kind of people that are required to bring all of that military force home.

It is not that they should slavishly be the last ones to turn out the light, but it is true that they have military skills that are needed as we bring all of that force, which has been characterized as the projection of a city the size of Richmond, Virginia, all the way, 8,000 miles to southwest Asia, and that clearly is a factor here.

Mr. LANCASTER. Mr. Secretary, I met with a Guard unit from my home county, which is in a maintenance battalion doing sentry duty and postal work; they are not doing maintenance. They are mostly farmers whose neighbors are now having to plant their crops, and they are fit to be tied. I hope you will look into this.

Mr. DUNCAN. You can be sure I will.

Mr. LANCASTER. Let me go on to another problem. A problem General Thurman mentioned his testimony deals with the highly paid professionals who are in Reserves and in particular medical care professionals, many of whom came, at least in my district, from small town, single doctor offices. I wonder if you could address the problems that we are going to face in retention and recruitment of these highly paid professionals, in particular medical care, but also lawyers and others who were called to duty and, in many cases, felt their services were under-utilized, especially if they remained in the States as back-fill.

Mr. DUNCAN. Was that directed to me, Mr. Lancaster?

Mr. LANCASTER. To any one of you.

Mr. DUNCAN. One of the things that affects medical personnel, physicians in particular, in the Reserve components was, at the beginning of the conflict there was a concern of inequity. If there is anything that, in my opinion, is one of the most important principles that has to fly here within the Total Force context, as you talk Total Force policy, it is equity, fairness, people being treated equally to the extent we can within the limitations of operational commitments and so forth.

There were some special pays that weren't being paid to medical professionals who were reservists that were being paid to their active duty counterparts, things of this sort. We even had the absurd situation, as you know, where many of the Reserve physicians weren't even protected with malpractice liability insurance when they were called to active duty because they had claims made—insurance or something—and it simply didn't cover them when they were called to active duty.

Working with the Congress, we proposed specific amendments to the Soldiers and Sailors Civil Relief Act. We recommended, and the

Congress adopted, the special pays. I can't tell you with certainty how it is all going to turn out, but a lot of good work has been done in recent months to correct some of those perceived inequities and actual inequities. So I am very hopeful about the long-term prospects.

Mr. LANCASTER. Would anyone else care to comment?

General THURMAN. I would just say, I think we have got a problem, and the problem requires some careful study as to how can we ameliorate that difficulty, particularly in the individual practices. I don't think we have the answers to that, and it is going to take going out and sitting down with the thousand or so health professionals that we called up and see what will encourage them to stay with us on a retention basis.

Mr. JEHN. It is a problem, I think, that all of us appreciate. We share your concern, Mr. Duncan and I, and Dr. Mendez, the assistant secretary of health affairs, just talked last week, for example, about this very problem. I think it is something we are going to have to look very closely at and examine our experience and draw lessons from it over the next 6 to 12 months, but it is potentially a very serious problem.

Mr. LANCASTER. What do you think about the number of conscientious objectors who surfaced as a result of Desert Storm, and what does that say about our recruiting policies over the past several years? Were we stressing perhaps too much the benefits of the military—education and training—and not stressing enough the fact that they might have to go into combat. As Bill Dickinson said a while ago in questioning that 49 percent thought that they might have to go in combat, were we ignoring combat and stressing the other benefits of the military so much that perhaps many people really didn't think they were in the military—that they were just in an education program and now they decide to claim conscientious objector status?

The CHAIRMAN. Also, how many were there? I read stories about it, but I never got much of a feel for what is the total number of people, or percentage of people, who were affected.

Mr. JEHN. The best numbers I have seen have been a total of only several hundred conscientious objectors presented themselves at the outset of the war or during the war or during Operations Desert Storm and Desert Shield, and those numbers are not greatly different than they are in other years.

I think the fundamental charge that draws out of—

The CHAIRMAN. Other years meaning years when there was no war?

Mr. JEHN. For instance, last year, yes, sir, 1989 versus 1990. The last time I asked to look at the numbers, the numbers in fiscal year 1990 were very comparable to those in 1989, for example. So we can try to run down the more detailed numbers for the record, if you would like, sir. The difficulty, of course, is that these applications are made at the local unit level and there is no central processing of them until the most meritorious of the applications reach the service headquarters. But we will try to run that down. As you can imagine, we have been asked that question.

[The following information was received for the record:]

The service headquarters take final action on conscientious objector applications. The following statistics are their working figures for the 9-month period between August 2, 1990 and April 30, 1991.

The Army received 141 applications, approved 89, denied 40, returned 5, and permitted 7 to be withdrawn by the applicants. The Air Force received 36 applications, approved 25, denied 7, and had 4 pending. The Navy received 68, approved 46, denied 18, and had 4 pending. The Marine Corps received 57, approved 21, denied 24, and had 12 pending.

Department of Defense totals: 302 applications received by the service headquarters, 181 approved, 89 denied, 20 pending, 5 returned, and 7 withdrawn. If this rate were maintained for a 1-year period, there would be approximately 240 approvals, a total very close to the Department's 1980 total of 228. The Department's 5-year average, 1986-1990, was 127 approvals per year. From a personnel management standpoint, these numbers are relatively insignificant compared to our active duty strength of over two million military personnel.

Mr. JEHN. But the more fundamental question, I think, that Mr. Lancaster raises is whether in some sense or another our advertising and our recruiting efforts have been misleading or unfair or duplicitous in any way, and I would say that charge is just plain silly. The statistics, for instance, General Thurman was citing were statistics drawn from our Youth Attitudinal Tracking Survey. These were individuals who were surveyed that are still, for the most part, in high school. They have not had any contact with our recruiters. Yet roughly half of them understand that joining the military means risking combat.

Now the advertising we give—it must be understood, our advertising is not designed to convince young men and women to enlist in the military, it is merely designed to alert them to the possibilities and opportunities that military service may provide. The actual selling of a military career, the actual delivery of detailed information about the nature of the job, the nature of the obligations incurred, and so on, comes in one-on-one encounters between the potential recruit and the recruiter, and those contacts are extensive, they are lengthy, they include a lot of materials that I think fairly and completely educate potential recruits about the obligations and the responsibilities they will be incurring should they enlist, and if any of them really are still mistaken, the first couple of days in boot camp really ought to straighten them out. Frankly, I don't think we are recruiting people who can be so easily fooled.

Mr. LANCASTER. Thank you, gentlemen.

General THURMAN. If I could piggy-back on, I think it is a non-problem on the grounds that, I tallied up all the people that come in the service, active, Guard, and Reserve, in the Army since Grenada, before Desert Storm, for example, or before Panama. We brought in 1.1 million people. So that 1.1 million people came in having a backdrop of knowing that we used forces in Grenada, and then since Just Cause to Desert Shield we have got another 200,000 people that came in, and so they saw things go on in Panama and now they find out about it.

I happen to have the numbers for conscientious objectors in the Army. For the period of Desert Storm/Desert Shield, the total number up through April 1991 is 135. Now put that in juxtaposition with a 1.5 million base, 750,000 active and 750,000 Guardsmen and reservists, 1.5 million; it seems to me it is not a problem.

Mr. DUNCAN. I would agree, Mr. Chairman. From a Reserve standpoint, it absolutely did not affect the call-up in any significant way.

Mr. LANCASTER. Thank you, gentlemen.

The CHAIRMAN. Mr. Cunningham.

Mr. CUNNINGHAM. Yes, Mr. Chairman.

I see now that people with Oliver Stone's view of the military have taken a back seat, thanks to not only a lot of what you have done but also our service people overseas. This last weekend, I attended an event in Oceanside, California, where we had 100,000 to 150,000 people who welcomed our troops back, and I would encourage Members and people in the audience here as well to take part in these. It wasn't just for the troops coming back—if you could have seen the faces of the children and their parents when they played the music, "Proud to be an American," I think that is going to stick with those kids as well as the troops for a long time.

I was interested in my colleague's question about cuts in active duty versus cuts in Reserve and Guard, because I think that could be a critical question coming up in the cuts. You may provide these answers for the record in the interest of time. When you have high-tech systems like we have now and will have in future conflicts, we will especially need to maintain people and retention factors, because those specialties are recruited from the outside community. We have seen the curve that can happen to recruiting in the future.

Do you see any future incentives or even obligations for people? For example, in the military when they were short of pilots, they offered an incentive for people who stayed in over a period of time, and also for those who incurred an obligation of service. Do you have any similar plans with the drastic cuts that are coming up?

I also would recommend that you fight like you train, and when we have cuts in Active Duty, Reserves, and Guard, that the key feature is training, and training, and more training. I know from serving in squadrons before with cuts, when you cut equipment you also cut parts, and you can't accomplish that training; it becomes very difficult. I would like to pay special attention to that.

After I got out of the service, I served as dean of a college. When we talk about all the great educational benefits, I know that there was a cap of around \$1,500, and you can't go to school very long on \$1,500 a year. Education is important, and I was fortunate enough to get 80 percent of my chiefs through with at least an AA degree and over 60 percent of them with a bachelor's degree, but much of the cost came out of their own pockets. But I encourage such endeavors in the future that education, quality, and high-tech is going to serve.

The question I would ask you to answer: Do you see any future cuts in the ability of the Reserves and Guard to actively take part in our anti-drug programs?

I know that in the State of California, being a border State, their service has helped immeasurably not only on illegal immigration but also in the reduction of drug trafficking. I would hope that with all the cuts that these same services would be provided in the anti-drug area.

Mr. DUNCAN. The answer is no. I follow that very closely in my other job as the Drug Coordinator for the Department through Desert Shield and Desert Storm. I was following very closely the number of volunteers in the National Guard, how is that tracking, as we are calling up people to go to southwest Asia. What effect is that having on our use of the National Guard and the Title 32 status to fight counter-narcotics. I was delighted to learn that it really didn't have much of an impact at all.

You have to understand that the National Guardsmen who are engaged in the individual counter-narcotics programs of the individual States are volunteers who have to do that over and above all of the training that is required to meet their wartime mission requirements, and we continue to have large numbers of volunteers who are anxious to do that. I think that is a function of the fact that they see a real need in their communities, and they are anxious to perform. There are many reasons, but I can tell you that we continue to improve our ability to find ways to use the National Guard in the counter-narcotics fight, and it is becoming increasingly successful each year.

Mr. CUNNINGHAM. It has been a great benefit to the State of California also, Mr. Secretary.

I yield my remaining time, sir.

The CHAIRMAN. Mrs. Lloyd.

Mrs. LLOYD. Thank you very much, Mr. Chairman.

Secretary Jehn, Secretary Duncan, and General Thurman, thank you for being with us and for your excellent testimony.

I would like to certainly add my comments to those of my colleagues in seeing that our Guard and reservists are brought home as soon as possible. I think we ought to give special attention to those who are self-employed. I know first-hand that there are many young couples who are really not only emotionally devastated but financially devastated as a result of this service. I think this is one area where we do need to give special attention.

But as we look at our lessons learned, I think it is also important that we look, in our recruiting, at the men and women who are accepted in the Guard and reserve specialties and make sure they possess the skills and the potential that we need in our all-volunteer force. To me, it is a little bit ludicrous when you have a med-dep Reserve unit, a medical unit supposedly composed of 100 percent medical personnel, and when the unit is actually called up you find that only the commander is a physician who has the skills to be deployable. This is a waste of time and money—to have a unit where you have pediatricians, gynecologists and obstetricians instead of surgeons and orthopods. We have people with skills that we really don't need. To me, every member of the Guard and Reserve should be deployable. Are we really looking at such issues, Secretary Duncan?

Mr. DUNCAN. Yes, Ma'am.

Let me suggest that one of the biggest challenges we face in matching the skills of the Guardsmen and reservists to the needs of the armed forces is that, as a person, as I mentioned earlier, something like 60 percent of our Guardsmen and reservists had prior active duty experience, and as they come out of the armed forces and they go back to their local communities, they are

trained in one military skill. Now this applies to broader than just the medical community. They are trained in one military skill, and they go back to their communities, and they try to associate with a Guard or Reserve unit in their communities, and very likely the skill that is required, the position that is vacant, the position that is open in their unit in their local community requires a military skill different from the one that they were trained in when they were in the armed forces. So one of our biggest challenges is how to resolve that.

You add in the factor that young people in the United States move constantly. I mean we are a very mobile society. Young people move, and just about the time you get them skilled on one military skill, then they move to another community and they associate with another Reserve unit, and it may require training for yet an additional skill.

The services have placed a lot of attention on that. It has been one of my priorities in recent years, and I am very encouraged because the services are learning how to train these youngsters in the new military skills. We started with lengthy schools that could only be attended by active duty personnel because reservists couldn't be away from their civilian jobs, but we are learning how to engage in training that does not require 16 weeks of schooling. So it is going to continue to be a challenge. We haven't solved it.

Mrs. LLOYD. Where did we have a lot of shortfalls because of units that weren't deployable?

Mr. DUNCAN. Well, I agree with you that a Selected Reserve unit ought to be deployable.

One of the things that General Thurman was commenting on was, how do we use the IRR, the Individual Ready Reserve? We found that we had to take a lot of people from the Individual Ready Reserve and plug them into Selected Reserve units because they had skills that were needed—in the Army's jargon, cross-leveling of personnel.

One of the things I am interested in exploring is whether we should explore the creation of a kind of Individual Ready Reserve that has critically needed skills, that is different from the current Individual Ready Reserve. These are the kinds of things that we are discussing within the Department now.

Mrs. LLOYD. I would hope that one of the lessons learned is that this is a real world and our Guard and Reserves should all be prepared in the event of conflict. We hope we don't have another conflict, but when there is a mission, they should be deployable.

Mr. DUNCAN. The Selected Reservists, no doubt about it, have to be ready to go.

Mrs. LLOYD. The other area I would like to call attention to is the all-volunteer force, the total concept. I think there are some cases really deserving of attention where the Guard units were treated less than equally in Operation Desert Storm by their active counterparts. If they are called upon for this duty, then certainly I think they deserve the credit, especially the ones who actually went into combat.

Have you heard any reports, Secretary Duncan?

Mr. DUNCAN. Well, I guess I need to know a little more precisely what you are talking about. In specific units, as we come across in-

stances of unequal treatment, we seek to stop it. We are totally against that. "Total Force" isn't just "Total Force" for some things and not "Total Force" for others.

I talked a bit ago about the perceptions of equal treatment and equality. That is very important to what makes people motivated.

Having said all of that, we tend to focus on challenges to be met and obstacles to be overcome, as we should. I think it is also healthy from time to time to stop and say, "How far has this Total Force idea come?" and I will tell you that it has come a long, long way just in recent months and a long, long way in the last decade.

Mrs. LLOYD. I want to commend you, gentlemen, especially you, General Thurman, for your dedication and your hard work. As members of this committee and you certainly in your capacity, we all want to really make sure that our lessons learned show us where we can all do better.

Thank you very much.

The CHAIRMAN. Buddy Darden.

Mr. DARDEN. Thank you, Mr. Chairman.

I believe my concerns have been addressed by other members of the panel, so I will pass at this time.

The CHAIRMAN. Thank you.

Let me just ask one last question of Max Thurman. Tell us the story of the improvement of the all-volunteer force from the Army's standpoint. What happened? What were the components of changing the quality of this force so dramatically from 1979? Was that the low point?

General THURMAN. That was the low point.

The CHAIRMAN. OK. To what we saw in Desert Storm.

General THURMAN. The principal thing was to tell what recruiters—tell them what to do. Most people are good people that want to do right, but if you don't give them instruction they are liable to take courses of action that are not congruent with leadership's view of where they ought to go. So the first thing we did was go on a contract mission to get the recruiter out of making the near-term, next week mission.

I recall going into a city when I asked the lieutenant colonel running the recruiting battalion, "Show me where the nearest high schools are," and he laughed at me. I mean I was only a major general, but he laughed at me. He said, "I don't go into any high schools. I am the balancing act for getting the mission for next week, for next Monday, so I go in the street market."

So what we did was, we took a gigantic gamble and said to the recruiter, "Your job is to go after mental category 1 to 3A and precisely give everybody a little mission box that they carry around in their pocket," and they had never been told to do that before. So, since nobody has 1 to 3A stamped on his forehead, that means you have to bring a number of people in to get them tested and find out whether or not they are lucrative applicants.

That then turned us in to the high schools, because then it wasn't just street market any more, it was go after high school diploma graduates, because the chances are the graduation rate says that they are going to be people you are looking for.

We changed the advertising scheme dramatically. We changed the advertising scheme to portray the fact that the Army was a

high-tech service, even though it wasn't perceived to be. It was perceived to be Willy and Joe. But we said, "No, no. The M1 tank has got a laser range finder, and it's solid state computer, and night vision devices, and the like, and we have very sophisticated equipment, and you have a number of opportunities to do that."

Then, at the same time, we toughened up our training stance both in recruit training and what we were doing in the units. So over a period of time, we began to make the shift. The most dramatic shift in the training came in—it was a vision in 1975, and it came to fruition in 1981, when we began to go to the desert training center at Fort Irwin, California, and people understood what it was all about, to take their unit in the field and engage an enemy force that had no quarter and was unrelenting in its performance in the case of the opposing force out there.

So I would submit to you there is a complementary set of things that went on. Quality people began to come in. As soon as quality people come in, then they graduate to noncommissioned officer ranks, and then you have higher quality in the noncommissioned officer ranks. Certainly we have a very high quality noncommissioned officer force at the moment. Then you are able to get solid, good, high quality equipment in the hands of troops, and we have that with the range of equipment you saw in Desert Shield and Desert Storm, but we had that as many as 6 years earlier as we began to phase that equipment into the force.

Finally, you can't ignore the doctrine and the leadership angle of it. We spend an enormous amount of time sending our people back to school, both at the noncommissioned officer level and at the officer level, in order to tell them what the doctrine is going to be and tell them how to care for people and how to cause people to carry out the doctrine with the equipment that they have.

Toward Mrs. Byron's point, we made a commitment when General Wickham was the chief that we were going to look after Army families, and we have really turned ourselves about in terms of doing that. More than half of our force is married. So all of that synergistically comes together to say the Army is a good place to live and work and that the training that we do and the work that we do is meaningful work, and then you see the evidence of it in the conflict just over.

The CHAIRMAN. Max, thank you very much; and, gentlemen, thank you all very much for your testimony this morning.

Charlie Bennett is here.

Would you like to ask questions, sir?

Mr. BENNETT. Well, what I am here for today is to accentuate some things that have already been brought out. Since we in Congress are elected every 2 years, the people who are unhappy about the way in which this is winding down have come to us. Therefore, we know, to a degree which you couldn't know, because it would take too long for the people to get to you, how they feel about the Reserves and the National Guard and how they are being approached at the end of this war.

It would be a pity, indeed, if a lack of that knowledge on your part would lead you to think that everything is in good shape; it is not in good shape. People are very distressed. They have a feeling that, "Well, we were in the National Guard and the Reserve, and

that sort of indicates, even with the mixture of the two, Active and Reserve, functions, we still felt that we were Reserve with a small R and we would not be unduly trespassed upon."

I am saying this to you because I think somebody in the Department of Defense—preferably Mr. Cheney or someone else in a very high position like Colin Powell who has a rapport with the public, ought to quickly, in the next 24 or 48 hours, announce a policy that we can all be proud of with regard to the National Guard and Reserves and how they are being used at this moment. At this moment thousands of young people in our country feel that they got into the Reserves for whatever reason—basically patriotism—and they thought they had certain obligations, which were essentially of Reserve nature, with a small r, and now they are thrilled about the fact that they are a real part of this deployment.

But they feel that with thousands of active duty personnel who are going to go for a 30-year career in the regular military, that this should now be winding down. It isn't that complicated to re-train people.

I remember in World War II at times I was handling stevedores. I was a platoon leader in an anti-tank outfit, but actually I was a stevedore boss in New Guinea. It was not something that I was ever trained for; I just had to use my head. We had that much material we had to move, and how do you move it with what we have to move it with? You have a lot of intelligent people in the service, and actually the ability of a person to be a good soldier, sailor, or airman means that he can react to unusual requirements.

So, in my opinion—and I don't have the perfect words now, but if I were Colin Powell, or if I were Secretary Cheney, or if I were the President, I would issue a statement and say this is a very real problem caused by our great success in this war, which came to an end very quickly. There are several problems that are difficult. You touched on a very good one, which needs to be explained.

The first thing I would say, is that the Reserves are going to be returned home as promptly as they can and on a priority basis, with consideration, however, that there are some functions of the Reserves which are so specialized and not easily replicated in the active duty service that these few units will not have the advantage of being moved home as quickly because of that special service. That is understandable to the people who complain to me about this matter. It is not understandable to have people go over there as basic Reserves and National Guard and then have people who are going to spend the rest of their life in the Active Duty military take precedence over them coming home.

This is a problem, and it is going to be a problem for the future. You do want to have a popularly supported military in this country, and you won't have a popularly supported military unless you take care of this and unless you take care of it on an urgent basis.

You see, the Congressmen are learning about this, but we can't direct the executive branch on what to do except by passage of laws, and that takes time to do. You don't want us to do that anyway. You don't want an urgent bill passed through Congress to tell you what you ought to be doing anyway.

So what I am saying to you is, don't pass this off. Somebody in this group, take it back to Secretary Cheney. I'll write him a letter

about it, but somebody who is actually in the organization gets things working faster, and you really should do it.

The other thing Mr. Lancaster also touched upon is the question of people with high specialties, particularly doctors. The doctors I have in my district are ones who are serving very poor people. In other words, they are the doctors who serve very poor people in my district, who are not now getting the kind of medical care they ought to have. If possible, they should be brought back, not for them to make money but for them to take care of the health problems in our country.

All I wanted to say was, I hope that somebody at this table here will take this problem back as an urgent matter to be solved, because by the time you find out about it, it will be too late. In other words, we found out about it because we have to run for office, but you don't have to, and people are scared of you anyway because you are in the chain of command and you can do them in for being worry-worts. You really ought to grasp them to your hearts like they are your kids and you are going to take care of them, because right now that feeling is not at all prevalent in that area. These people are very bitter, very hard, and you need to solve this problem, I think, within the next 48 hours.

Mr. DUNCAN. We appreciate your comments, sir.

The CHAIRMAN. Thank you, and, gentlemen, thank you for very helpful and very interesting testimony.

General THURMAN. Thank you very much, Mr. Chairman.

Mr. JEHN. Thank you, Mr. Chairman.

The CHAIRMAN. We would like to next call the panel of active component recruiting chiefs, please, to come forward.

Let me at this point welcome the members of the panel of active component recruiting chiefs. These are the people responsible for the recruiting for the active component in each of the services.

We have with us today Major General Jack C. Wheeler, who is the Commander of the U.S. Army Recruiting Command; we have Brig. Gen. Gary E. Brown, who is the Director of Personnel Procurement for the U.S. Marine Corps; we have Brig. Gen. John J. Salvadore, the Commander of the Air Force Recruiting Service; and Rear Adm. Henry C. McKinney, who is the Commander of Naval Recruiting Command.

Gentlemen, thank you very much for being with us, and if you have an opening statement, we would like to hear it. Let's start with General Wheeler. Then we will go to General Brown, then General Salvadore, and then finally to Admiral McKinney.

STATEMENT OF MAJ. GEN. JACK C. WHEELER, COMMANDER, U.S. ARMY RECRUITING COMMAND

General WHEELER. Thank you very much, Mr. Chairman.

Mr. Chairman and members of the committee, I welcome the opportunity to appear before you and address issues regarding Army recruiting.

I have prepared a statement for the record and would like to make the following brief comments. This committee has been very, very supportive of the Army's successful efforts to build and main-

tain a high quality force of volunteers, and for that support we in the Army are most grateful.

For the first time since the start of the all-volunteer Army in 1973, the Recruiting Command this past year faced recruiting during a major deployment, with a ground war a distinct possibility as we entered fiscal year 1991. Much of the world and a concerned American public focused on our bottom line. In those 7 critical months, August 1990 through February 1991, the Recruiting Command exceeded its accession mission and did so with record-breaking quality numbers.

The single fact that more than 40,000 young Americans from all walks of life reported for active duty during the first 5 months, August through December, of Operation Desert Shield compared to 34,000 during the same time frame the year before eloquently speaks to the character of our Nation's youth, and the quality marks, I might add, were also excellent. Indications are that enlistment incentive programs provided by this committee were crucial to our recruiting successes, particularly with regard to quality marks.

This is not to imply that it was business as usual for recruits during Operation Desert Shield. Recruiters throughout the Nation reported that the combat deployment was a challenging factor in their recruiting environment, and I will be glad and able to discuss this in more detail during the question and answer period. They consistently reported, however, that young people continue to see the Army enlistment as an attractive and attainable first step to get an edge on life through money for college, skills training, and opportunities to mature and hone their own individual leadership skills.

Education benefits continue to serve as the centerpiece of our appeal to young Americans, and with the enhanced Montgomery GI bill, combined with the Army College Fund, Army enlistees will continue to see Army education benefits as a valuable resource for financing their higher education in fiscal year 1992 and beyond.

As this Nation committed itself to war, we met our mission and broke quality records. That quality is easily expressed in terms of combat readiness. The Patriot air defense missile system offers an example. The U.S. News and World Report said—and I quote—"Restored faith in American technology." The Patriot system, however, requires soldiers to operate it.

A recent Rand Corporation study found that a Patriot operator's ability to perform his mission to defend assets, destroy targets, and to conserve missiles increased as his armed forces qualification test score increased. In other words, the better he scored on the test, the better he operated the Patriot.

In today's smaller, high-tech Army, smart weapons are matched with smart people. Throughout the two decades of the all-volunteer Army, the definition of quality soldier based on education and test scores has been confirmed and reconfirmed. The validity of that measurement was borne out in 100 hours last February.

Looking to the future for active Army recruiting, more than 90 percent of fiscal year 1991's enlistment requirements today are either assessed or under contract in the Delayed Entry Program,

and the quality remains as high as our record-breaking results during Desert Shield and Desert Storm.

Moving to Reserve recruiting, Army Reserve recruiters faced the same wait-and-see attitudes as active Army recruiters during Operation Desert Shield but also continued with operational difficulties. As units were activated for deployment to the Persian Gulf, enlistments for these units were temporarily curtailed, which constrained Reserve recruiting.

Army leadership implemented policies in January 1991 to remove these constraints. These included filling units to 105 percent of their wartime required strength and continuing to recruit for alerted units.

Operations Desert Shield and Desert Storm may have created new challenges for Reserve recruiting. We are capturing data and developing strategies for the future for Army Reserve recruiting. The Army, along with the Rand Corporation, is studying relevant issues, and upon completion of the study we will provide this committee the results and recommendations emanating from the study.

In the shorter term, we have recommended a number of USARC enlistment incentives to the Department as we continue to war game manpower planning assumptions and scenarios.

I will be happy to address your specific questions a little later, but I need to emphasize that, whatever we do in this transitional period, we cannot afford to take our eye off the mark of a high quality total Army.

Moving just a moment to advertising, Mr. Chairman and members of the committee, recruiters get help recruiting from Army advertising, advertising that works because it says the right things to the right audiences. Generating contacts among young people, or prospecting, is time consuming work for our recruiters and would be much harder without Army advertising.

Recruiters cannot personally speak to everyone, and most young people are not inclined to consider an Army enlistment. The OSD's annual Youth Attitudinal Tracking Survey indicates that 88.7 percent of the quality men surveyed say they probably or definitely do not intend to enlist in the Army.

We speak to the American public in many ways and through different media. Our principal theme is simply that service in the United States Army endows lifelong advantages on the individuals who serve and on the Nation. In the words of our now famous slogan, it helps young adults be all they can be and get an edge on life.

These messages also put us squarely in line with what parents and teachers want for our enlistment prospects. Making common cause with educators is particularly critical, because we depend on the schools for our supply of quality enlistees.

For that reason, an important part of our communications are directed at building a partnership with educators. First, we offer professional career guidance information on Army opportunities, and we also actively help educators encourage students to study and stay in school and obtain that diploma. An Army "Stay in School/Stay Off Of Drugs" program instituted nationally this year, fiscal year 1991, earned the praise and gratitude of educators, counselors, and parents.

Finally, we work to create programs that merge the goals of educators, their students, and, indeed, the United States Army. In a cooperative venture, with more than 300 colleges and universities, we have enabled Army recruiters to encourage high school seniors to make college plans before leaving for basic training. The Concurrent Admissions Program, known as CONAP, will soon be expanded nationwide.

We have a multidimensional advertising and communications program. However, our budget was reduced 43 percent in fiscal year 1991 from fiscal year 1990. If we stabilize at this low level, it will not allow us to sustain an effective reach and frequency of our message. We will risk future mission failures and will generate other problems.

For example, recruiters can compensate for under-funding in the short run, but the penalty is increased stress and damaged quality of life over the long term. We have an opportunity to demonstrate to Americans that their Army is a resource not only for defense, Mr. Chairman, but for education, a resource for business, and a resource for society, while simultaneously providing for a strong national defense. However, we need a reasonable investment in our advertising programs to achieve that goal.

In summary, sir, we owe all of those who reported for duty during Operations Desert Shield and Desert Storm our gratitude. These young Americans have enlisted for their own reasons, which is what volunteerism is all about.

When Army advertising tells young adults to be all they can be through service to their country, it urges them to better themselves not only while in uniform but as responsible, productive citizens of this great Nation.

Polls show that the American people have an extremely high level of confidence in their military. We know that confidence is well placed, and we intend to do everything necessary to sustain it. With your understanding and continued support, the kind of support which got us where we are today, the Army will continue to provide a strong, capable, and flexible force for any contingency.

I thank you, sir, and the committee very much for your time.

PREPARED STATEMENT OF MAJ. GEN. JACK C. WHEELER

Mr. Chairmen and Members of the Committee:

I welcome the opportunity to address issues regarding Army recruiting, in response to the Committee's request, and submit this statement for the record.

This Committee has been very supportive of the Army's successful efforts to build and maintain a high quality force of volunteers, and for that support, we in the Army are most grateful.

Twenty years ago an Army made up entirely of people freely choosing to serve was a bold concept firmly supported by Congress. The events of the last nine months presented the all-recruited Army a first and formidable opportunity to prove this vision a successful reality.

In 1971 critics of an all-volunteer force predicted a gradual erosion of the military's effectiveness. One of the objections was that not enough highly qualified youths would be likely to enlist and pursue military careers; and, as the quality of soldiers declined, the prestige and dignity of the Army would also decline and further intensify recruiting problems.

The president's commission on the All-Volunteer Force, chaired by the Honorable Thomas S. Gates, Jr., answered that an all-volunteer force should enhance the dignity and prestige of the military. To support an all-volunteer force, the Gates commission recommended: improving basic compensation, expanding recruiting programs supported with enlistment incentives, and measuring recruit quality by educational attainment and test scores.

For the last decade the U.S. Army Recruiting Command, with support from this Committee, has aggressively pursued recruiting efforts in the youth quality market. With the right mix of enlistment incentives and a dynamic advertising and marketing plan, the Recruiting Command continues to provide the strength--the numbers and quality of soldiers needed to maintain a combat-ready Army.

However, the first true measure of the all-volunteer Army's success came early in Operation Desert Shield. This nation was justly proud as volunteer Regular Army and Reserve soldiers--many who freely listed money for college as a primary motive for joining--took up combat missions in the Gulf. Each of these men and women had raised his or her right hand and taken a solemn oath to protect and defend the Constitution of the United States.

Army Private First Class Paul Naworcki, an artillery howitzer driver, summed it up for most soldiers--who joined a peacetime Army and was deployed to the Middle East--when he said, "There's no complaining, 'Why do we have to go?' I don't hear that. We're just pulling together, working as a team."

That's not to imply soldiers didn't have fears about what lay ahead during Desert Shield. Specialist Michael Aragon, a medic, said, "I hope I can make it out alive, if it comes to that. But it's something we have to do."

His commander in the 101st Airborne, said, "They are certainly not anxious to go to war, but they are ready."

For the first time since the start of the all-volunteer Army in

1973, the U.S. Army Recruiting Command faced recruiting during a major deployment, with a ground war a distinct possibility. Much of the world and a concerned American public focused on our bottom line. In those critical seven months, the command not only provided the strength, we exceeded our accessions mission and did so with record-breaking quality numbers.

The single fact that more than 40,000 young Americans, from all walks of life, reported for active duty during the months of October 1990 through February 1991 compared, to 34,000 over the same five-month period in Fiscal Year 1990, eloquently speaks to the character of our nation's youth. More than 96 percent of these new recruits were high school diploma graduates, and more than 72 percent scored in the top half of the Armed Forces Qualification Test. Less than 2 percent were in the lowest acceptable mental test category. These figures also attest to the professionalism and integrity of our 4,900 Regular Army non-commissioned officers currently on recruiting duty, and their supporting structure.

Indications are that the enlistment incentive programs provided by this Committee were crucial to our recruiting successes. This is not to imply that it was "business as usual" for recruiters early in Operation Desert Shield. Recruiters reported that Operation Desert Shield was a factor in their recruiting environment. They consistently reported, however, that young people continued to see Army enlistment as an attractive and attainable first step to get an edge on life through skills training, money for college and opportunities to build

character and hone leadership skills.

During Fiscal Year 1990, 92 percent of all Army enlistees signed up for the Montgomery GI Bill; thus education benefits serve as the centerpiece of our appeal to young people. And with the new Montgomery GI Bill combined with the Army College Fund, Army enlistees will continue to see Army education benefits as a valuable resource for financing their higher education.

Operation Desert Shield did change the recruiting market, which prompted adjustments to our Production Management System. In late September and early October, we saw that the time lines required to conduct an appointment, test the applicant, conduct physical examinations and contract for the Army were becoming longer. In some instances, this time line went from an average three-week period to more than six weeks from initial contact to contract.

However, recruiters began to sense the kind of playing field they were now on and adjusted. For example, recruiters found that involving influencers (parents and spouses) earlier into the process helped. This and other adjustments paid off. The situation changed dramatically in January as Desert Shield gave way to Desert Storm. Just as public opinion firmed up behind the policy taken by the President and approved by Congress, some of the reluctance--the "wait and see" attitude--noted in some enlistment prospects began to evaporate. The onset of Operation Desert Storm was another first for the Army Recruiting Command. We continued to recruit as this nation committed itself to war, and still we met our mission and broke quality

records in so doing. But what does that quality mean in terms of combat readiness? We can use the Patriot air defense missile system as an example. Patriots, reported U.S. News and World Report, "restored our faith in American technology." The Patriot system, however, requires soldiers to operate it. A recent RAND Corporation study found that a Patriot operator's ability to perform his mission--to defend assets, destroy targets and conserve missiles--increased as his Armed Forces Qualification Test score increased. The better he scored on the test, the better he operated the Patriot.

In today's smaller, high-tech Army, smart weapons are matched with smart people. Research also shows that soldiers with a high school diploma perform better--with less crime, less attrition and greater reliability. Throughout the two decades of the all-recruited Army, the definition of a quality soldier based on education and test scores has been confirmed and reconfirmed. The validity of that measurement was borne out in 100 hours last February.

Looking to the future for Active Army recruiting, over 90 percent of Fiscal Year 1991's enlistment requirements are today either accessed or under contract in the Delayed Entry Program. As of the end of April, we continue with record-breaking quality: over 96 percent are high school diploma graduates, over 74 percent scored in the top categories of the Armed Forces Qualification Test. Less than one percent scored in the lowest acceptable test category.

Army Reserve Recruiting

Our 1,400 Army Reserve recruiters faced the same "wait and see"

attitudes as Active Army recruiters during Operation Desert Shield and also contended with some operational difficulties. As units were activated for deployment to the Persian Gulf (over 20 percent of the Army Reserve force structure), enlistments for these units were temporarily curtailed, constraining recruiting of qualified young Americans to serve in Army Reserve units.

Further, some of the recruiting challenge during Operation Desert Shield was due to past recruiting successes. Specifically, in the southeastern and southwestern parts of the country, many of the Army Reserve troop program units were either filled or close to 100 percent of their requirements. In some cases, with some units deployed and others at close to 100 percent strength, recruiters had few vacancies within a geographic area to satisfy needs of possible applicants.

Army leadership implemented policies in January 1991 to remove these constraints. These included filling units to 105 percent of wartime required strength and continuing to recruit for alerted units.

Army Reserve recruiters declared that when the Reserves were mobilized, it was in fact the American people mobilizing. They report that the support of the American people for Operation Desert Shield/Storm--demonstrated through tons of "Any Servicemember" mail, yellow ribbons and rallies--helped immeasurably in Reserve recruiting.

Even with the grass roots support of the American public during Operation Desert Shield and Desert Storm, the deployments may have created new challenges for this vitally important recruiting mission. For the long term, we are capturing data and developing strategies for

future Army Reserve recruiting. The Army, along with the RAND Corporation, will be investigating the relevant issues. Topics to be considered are: changing roles, mission and force structure; a reduced Active force size leading to a smaller pool of prior-service personnel available for recruitment into the Reserve; and possible effects of Desert Shield/Storm on retention and recruiting.

The RAND study began in April 1991. Some of the long term issues -- the reaction of returning Reserve Desert Storm veterans and its effect on recruiting--require time to unfold. Upon completion of the study we will provide the Committee results and recommendations emanating from it.

Advertising

Our soldiers performed competently and courageously throughout Desert Shield and Desert Storm. They were motivated and committed in their combat roles. During Operation Desert Shield and Desert Storm the public--through hours of TV coverage and reams of newspaper print--finally met the high quality soldiers the Army Recruiting Command has been enlisting, with the help of top-notch enlistment incentives, during the last decade.

The American public now has little doubt about the outstanding quality of our youth who volunteer to serve their country in the Army; media coverage was tremendously helpful in reassuring the public of our volunteer soldiers' sense of duty, their training, their leadership and their high-tech weapon systems. However, the high-quality young people who join the Army today do so only after careful deliberation of

many options and after learning how an Army enlistment can give them an edge on their future.

We take nothing away from our fine recruiters by saying they get crucial help from Army advertising. Army advertising works because it says the right things, at the right times and in the right places.

Generating contacts among the large number of sales resistant young people is time consuming work for our recruiters, but would be much harder without Army advertising. According to OSD's annual Youth Attitude Tracking Study, 88.7 percent of the high-quality men surveyed say they probably or definitely do not intend to enlist in the Army.

Our advertising is working to: give young adults reasons to enlist now; give younger teens reasons to consider enlistment when old enough; give parents reasons to encourage their sons and daughters to consider an Army enlistment; give school counselors reasons to urge exploration of enlistment; and give employers reasons to look for well qualified Army alumni to fill job vacancies.

We speak to the American public in many ways and through different media, but what we say is simply that service in the U.S. Army endows lifelong advantages on the individuals who serve, and on the nation. In the words of our famous slogan, it helps young adults "Be All They Can Be" and, to quote a recent advertising tag line, "Get an Edge on Life."

This message has been implicit in our advertising over the years, but recent labor market research now supports the claim of a job market advantage for veterans, even those who did not serve in civilian-type military jobs. These findings are explained by corresponding research

among business firms that tells us employers are less interested in occupational skills than in the "soldierly" attributes of dependability, pride in accomplishment, and ability to work on a team,

This future-oriented thrust in Army advertising first appeared in January 1989, with ads that say "employers want people who have acquired those important attributes." Together with ads reminding people that Army service can also help pay for college education, they comprise what we refer to as the "Army Advantages" campaign.

This campaign puts us squarely in line with what the parents and teachers of our enlistment prospects want for them. Making common cause with educators is particularly critical because we depend on the schools for our supply of quality enlistees. For that reason a very important part of our communications effort is directed at building a partnership with educators; an activity that has several facets. We provide them with professional career guidance information on Army opportunities, and we also actively help educators encourage school completion and academic excellence. An Army "Stay in School/Stay off Drugs" program launched nationally this school year won the gratitude of educators, counselors, and parents.

We seek every opportunity to develop programs which merge the goals of educators, their students, and the Army. In a cooperative venture with over 300 colleges and universities we have enabled Army recruiters to encourage high school seniors to make college plans before leaving for basic training. This "Concurrent Admissions Program" will be expanded nationwide this year (1 August 1991).

Finally, we are also working with the business community. Our "Army Advantages" message gives them a motivation to employ our Army alumni. It also serves to help those soldiers--whose careers are shortened by reduction in force actions--be absorbed quickly into the civilian work force.

We have described a multi-dimensioned advertising and communications program but one the Army now faces carrying out with a budget reduced 43 percent from FY 1990. If we stabilize at this low level, the Army will be committed to an inefficient mix of recruiting resources that will generate other problems.

Research in the industrial sector indicates that a sales force not well supported with advertising is cost ineffective. A large scale study of industrial product sellers suggested that in the most cost-effective sales programs advertising exceeded 20 percent of total sales expense. The Army program now stands at only 7.1 percent.

Recruiters can compensate for underfunding in the short run, but the penalty is increased stress and damage to quality of life. In the long run, the part of the job not being done by advertising must be handled by a larger sales force, or risk mission failure.

We have an opportunity to demonstrate to Americans that their Army is a resource for defense, a resource for education, and a resource for society, and in doing so provide the strength. However, we need a reasonable investment in our advertising programs to achieve that goal.

Again, I want to thank this Committee for its support and leadership. Your continued support will be crucial as we go through

the next few years of reshaping our Army. Through Operations Desert Shield and Storm, we have learned that programs provided by Congress have given us the flexibility to do the nation's bidding in rapid fashion.

We owe all those who have reported for duty in the service our gratitude and should acknowledge their steadfastness to serve their country in time of need. These young Americans have enlisted for their own reasons, which is what volunteerism is all about. Those individual reasons are very American and very admirable. When Army advertising tells young adults to "Be All They Can Be," and "Get an Edge on Life," through service to their country, it urges them to better themselves, not only while in uniform, but as future productive and responsible citizens of these United States.

The CHAIRMAN. General Wheeler, thank you very much. General Brown.

**STATEMENT OF BRIG. GEN. GARY E. BROWN, DIRECTOR,
PERSONNEL PROCUREMENT, U.S. MARINE CORPS**

General BROWN. Mr. Chairman and distinguished members of the Committee, it is an honor for me to be here today to represent the U.S. Marine Corps.

Before commenting on recruiting operations and advertising, I would just like to express my thanks and the Marine Corps' thanks for your support in the past. We have a very successful recruiting program, and that is due in large part to your help. So thank you very much.

You have my statement for the record where I address the impact of the Gulf war on recruiting. I talk about our approach to advertising and our view of recruiting in the future. However, I would like to emphasize a couple of points in the statement.

First, in regard to Operation Desert Shield and Desert Storm, you got a pretty good overview in the first panel as to what happened with recruiting. Our experiences are very, very similar. We started out with a great deal of uncertainty. Then we adjusted our recruiting efforts, and the way we recruited. We changed our market, and we learned how to recruit in the new environment, and then things got better.

I think the big turning point came for us when the Congress voted to support the war effort, because it seemed to me at that time—that once the country got behind what was happening over there—the citizens understood it. Then things turned around for us. We started seeing a greater flow of applicants into the recruiting stations, not always those that were qualified, but people coming in wanting to do things for their country, and I think you got the Army's view of their interview to contract ratios; it went from 8 to 1 to 12 to 1. At points during that whole period of time ours went from four to one to eight to one, which meant our recruiters were out there conducting a lot more activities and it was costing us a lot more money to recruit.

But since about January—we missed our new contracting goals in November and December—we have been doing very well and slightly exceeding our goals, so we feel very confident about what is happening right now. We think that we will make our goals through the remainder of this fiscal year. We are also surveying to find out about attitudes to see what happens in fiscal year 1992 and beyond.

The second thing I would like to talk about, sir, is our philosophy on advertising. It is a very, very simple one; we try to keep things simple. We focus on intangible things, the things that we think are benefits gained from being a Marine—self-confidence, self-discipline, pride, personal growth, leadership, esprit—all the things you get, the advantages, from belonging to a tough, elite organization.

Our television ads, which get the most attention, use this approach, coupled with metaphors. The ads are designed to create an awareness of the Marine Corps as an option for something to do for high school seniors after they finish school. The ads make it easier

for a recruiter to get face to face with an applicant to begin the real recruiting and selling process.

So, as was pointed out earlier, these ads are not designed to tell the Marine Corps story, they are a way to make it easier for the recruiter to get face to face. I call them supporting arms. When a recruiter talks to prospects, he has a starting point to begin the sales contract.

So, in short, I think that our advertising is honest, creative, and very cost effective, and it accurately portrays the Marine Corps as an elite fighting force. To paraphrase an earlier recruiting slogan, our advertising doesn't promise a rose garden; we tell it like it is.

The final point, sir, I would like to address is our advertising budget. Due to significant reductions in O&M dollars, we have diverted advertising money into recruiter supporter. We had to do this to keep recruiters out on the street, to pay the phone bills, to pay the gas bills, because during Desert Shield/Desert Storm, as we pointed out before, our activities increased, and that took more money.

As a result, I am not going to be able to buy any paid advertising in 1992. So, there will be no paid Marine Corps TV commercials, radio commercials, or no paid magazine ads. This is causing us some concern. We don't know how badly it is going to affect our recruiting effort. We do believe, however, that it is going to make the individual recruiter's job more challenging, and it will probably negatively affect his quality of life, and we have been working very hard the last year to improve that quality of life.

I will close then, Mr. Chairman, by again thanking you and the Committee for your support in the past, and we are very, very appreciative of your interest in recruiting issues. For the future, we firmly believe there is still a sufficient number of patriotic young American men and women who will respond to a call to serve their country in the U.S. Marine Corps. We will have to work hard to get them, but with your support we are prepared to do that.

[The following information was received for the record:]

Of particular concern is the fact that there is no one for one relationship between end strength and accession requirements. For example, even though our end strength decreases in fiscal year 1992, our recruiting mission is up approximately 3 percent from fiscal year 1991. Yet, our own recruiting budget has experienced negative growth since fiscal year 1987 and our advertising budget has been cut by almost half since fiscal year 1990. Recruiting is a substantially fixed cost operation; so when resources are diminished and requirements increased, future programs can be expected. Without paid television, radio, or magazine advertising our awareness, lead generation, and recruiter support will all decrease and make it much more difficult to achieve a healthy start pool for fiscal year 1993, the same year that the Qualified Military Available (QMA) reaches one of its lowest levels, 20.9 percent less than in fiscal year 1987. We have found out that we need strong start pools to sustain recruiting success. Without some budgetary relief for advertising, attaining a strong start pool for fiscal year 1993 could be especially difficult.

PREPARED STATEMENT OF BRIG. GEN. GARY E. BROWN

Mr. Chairman and distinguished members of the Committee:

It is indeed an honor for me to appear at this hearing representing the United States Marine Corps and our recruiting service.

Thanks to the continued support of the Congress the Marine Corps is experiencing yet another highly successful recruiting year. All Total Force quantity and quality goals are being met or exceeded, in both our officer and enlisted programs for the Regular and Reserve structure. Ninety-seven percent of the enlisted accessions were high school graduates while the average Scholastic Aptitude Test scores for newly commissioned second lieutenants was 1149 as compared to our standard of 1000 and a 1990 national average of 903. As we move into fiscal year 1992, we expect to have over 60 percent of our enlisted force requirements already in the Delayed Entry Program (DEP).

The Marine Corps is doing well. We are recruiting the quantity and quality of Marines we need and, with your help, we expect to continue. This statement addresses the impact of the war in Southwest Asia on recruiting, our approach to advertising and our view of recruiting in the future.

The Operation Desert Shield/Storm
Recruiting Situation

Prior to Operation Desert Shield/Storm, we were being challenged by several recruiting factors. The Qualified Military Available population has been, and will continue to be, shrinking from 3.77 million in 1977 to an estimated 3 million by 1994 -- a 20 percent decrease. Increasingly, colleges and businesses compete with the Services for this dwindling group.

The group's attitudes about military service are also changing. Plans for downsizing the Services have led many to believe that military service is no longer a viable career choice. Indifference is growing. In an August, 1990, survey respondents who stated they would consider enlisting in the Marine Corps dropped from 33 percent to 26 percent from August 1989 to August 1990.

The chart provided as enclosure (1) is a synopsis of some specific Operation Desert Shield/Storm impacts which are elaborated as follows.

The situation in Southwest Asia made the recruiter's job even more challenging. They faced some unique hurdles. Because of the situation in the Gulf, many applicants, particularly high school seniors, were hesitant to commit. As a result, the

spontaneity and flow of high school senior enlistments into the DEP that we are accustomed to during the fall and winter slowed. We relied more heavily on the graduate market for new contracts.

Hesitancy by high school senior applicants was not necessarily of their own volition. It was likely caused by parents who were more reluctant to grant parental consent and others in positions to influence applicants (teachers, counselors, state and local leaders) who stressed a "wait and see" attitude. Their views definitely affect youth attitudes regarding enlistment in the Armed Forces. Probably for similar reasons, we also experienced an increase in DEP attrition. During October, 1990 through February, 1991, we discharged 391 more from the DEP than we did during the same period in 1989, a 13.3 percent increase.

The media also had an impact. Recruiter perceptions and attitudes stemming from exposure to media reports, which focused attention on increasing difficulties associated with recruiting as a result of our commitment in Southwest Asia, had the effect of slowing new enlistments. We also believe that prospects and their parents were negatively influenced by such publicity. Furthermore, the notoriety over actions taken by San Francisco Bay Area school districts and others to ban military recruiters is a cause for concern.

Despite the war, fine young Americans continued to join. They heard the call to duty and responded selflessly. The school boards that ban us, however, seek to mute that call and restrict favorable exposure to our Armed Forces from the minds of America's youth. We believe that students should have the opportunity to receive information about military service alternatives.

Additionally, with a preponderance of Marines deployed (Regular and Reserve), participation in our recruiter support programs fell off precipitously. This is significant because recruiters rely on help from these programs which normally account for over 25 percent of their enlistment contracts. With activation of reserves, our recruiter aide and reserve unit referral programs seriously lagged in their recruiting contribution. Similarly, with the magnitude of the Marine Corps' involvement in Southwest Asia, few Marines were available to participate in our command recruiting program. The recruiter assistant program, which relies heavily on graduates from recruit training, was the only remaining viable recruiter support program. With units now returning home we expect overall support to improve.

Fiscal year 1991 budget reductions also led to a decrease in support to recruiters which predictably increased the difficulty of recruiting. Advertising, long distance phone calls, vehicle

mileage, travel, and training and quality control inspections are examples of recruiting support functions that have been curtailed. Paradoxically, Operations Desert Shield and Desert Storm compelled recruiters to operate in a more difficult environment and make more phone calls, drive more miles, and screen, interview, and process more applicants -- all with less advertising, and support, and fewer resources at their disposal. The need for increased activities requires more money which is difficult to glean from our lean recruiting budget. The burden is thus placed on the individual recruiter to attain a more challenging quota with less. In an attempt to sustain sufficient recruiter activity levels, planned advertising expenditures have been diverted, necessitating cancellation of all paid media for fiscal year 1992. With 3% increase in our 1992 recruiting mission we are hopeful that funding will be reconsidered in the fiscal year 1992 budget process and restored to fiscal year 1990 levels.

Finally, with unity of purpose achieved by our national leadership, and with the outbreak of hostilities followed by a swift victory, interest in joining the Marine Corps has increased. As a consequence, we have exceeded our contracting goals by a wide margin for the last four months.

Advertising

The Marine Corps' primary advertising goal is to generate awareness of the Marine Corps in a prospect's mind. To accomplish this goal, the advertising must set the Marine Corps apart from the other post-high school alternatives. The Marine Corps has discovered that when the public views a military ad featuring an aircraft it thinks of the Air Force, featuring a ship -- the Navy, and featuring a tank or camouflage field uniform -- the Army. The Marine Corps' challenge is to place a memorable, honest, highly visual message that differentiates the Marine Corps from the other services and sets it apart as a desirable option.

Substantial analysis and marketing logic are incorporated into the development of all commercials. Marine Corps television commercials are aimed at young Americans, sixteen to nineteen years of age, who plan on completing, or have completed high school and consider the military a good option. The ads are also created to appeal to a secondary audience of prospect influencers such as parents, educators, and relatives.

Given our overall advertising budget for a fiscal year, the Marine Corps determines how much we will allocate to awareness efforts (media), lead generation efforts, research, and collateral material production. The Marine Corps makes this

allocation in concert with our advertising agency based on the recruiting goals established for the fiscal year. Once the media budget is set, the advertising agency uses it as a starting point in developing the fiscal year's media plan. given a desired "reach" (percent of the target market we want to reach), and "frequency" (number of times we want to reach that percent of the market), the Marine Corps chooses different advertising media.

Research was conducted to determine our target market's needs and desires. The results indicated that BELONGING, INDEPENDENCE, EXPERIMENTATION, RESPONSIBILITY, APPROVAL, and FRIENDSHIP were all clearly evident as prospect needs. The underlying strategy of our advertising has always been to cement the relationship between the prospect's needs and the attributes and benefits of the Marine Corps that can fulfill them. the Corps' strengths and opportunities match up well. The Corps has a fraternal quality, a team-oriented "band of brothers" ethic which meets the needs of BELONGING and FRIENDSHIP. The self-confidence and self-sufficiency a youth develops build a feeling of INDEPENDENCE. As for EXPERIMENTATION -- the Corps has always been known as a proving ground. The leadership opportunities inherent to the Corps demand RESPONSIBILITY and the reputation as an elite fighting force provides immediate APPROVAL. And finally, the INTANGIBLES: honor, loyalty, commitment, and leadership are the benefits that the Marine Corps promises in its

advertising. Every recruit will be exposed to these ideals and is invited to make them a part of their way of life.

Equally important to the content of our strategy is the actual execution of that strategy. We ensure all our television ads have the following qualities: They must have STOPPING POWER, an intrusiveness and uniqueness that grabs the viewers and makes them want to watch. The ads must have CONTEMPORARY APPEAL, yet remain faithful to the historic image of the Corps. Since our prospects are video-oriented, the ads must be HIGHLY VISUAL. Finally, the advertising, for economy, must be TIMELESS. There should be no reliance on current events or dating of the material. The Marine Corps can only afford to produce a major advertisement once every four or five years. Therefore, it should have an indefinite "shelf life" since its presentation will always be fresh to each succeeding target market.

Products of this process are the "Sword," "Knight" and now our "Chess" television commercials. All three are metaphors for the INTANGIBLE benefits which the Marine Corps believes will fulfill a prospect's needs. Research conducted by the Marine Corps, DoD, and the other Services, all indicate that these commercials very effectively convey the Marine Corps' message to the prospect. Our "Knight" ad cost \$360,000 in 1986. When this cost is adjusted over the five year period that it has served us as our first line ad, the annual cost is \$72,000 -- a cost

effective, high quality advertisement. Industry averages on production costs approximate 10% of available media budget for a 13 week run. The Marine Corps economizes by looking for a timeless, high impact production that we can continue to use because its indefinitely relevant and effective.

We are just as confident that our new commercial "Chess" will fare as well, if not better, than our previous successful creative efforts. In fact, "Chess" will help to revitalize both "Sword" and "Knight" and extend their shelf life.

"Chess" launches a new approach for the Marine Corps -- that of mental strength. The concept is based upon our Commandant's philosophy of "Smart Warriors". It is no longer good enough to just be tough in order to be a Marine. You also have to be smart. Our future creative work will in some way support the notion of "Tough and Smart". Research has shown us that mental toughness is another intangible that is of interest to our Nation's youth. It certainly is a trait which we cultivate in our Marines.

Those ads, however, are only the tip of the advertising iceberg. Television commercials, as well as our radio commercials and print advertisements, are known as general interest advertising. The purpose of general interest advertising is to build awareness of the Marine Corps and to

positively predispose the prospect toward the Marine Corps. These advertisements serve as a stepping-stone toward getting that prospect to meet with a recruiter. It is during this meeting that the recruiter "sells" the Marine Corps. It must be emphasized, however, that our recruiter's appeal to prospects is based on the reputation of our Corps and our proud warrior traditions. We enlist applicants to serve their Country -- as Marines first -- and not for specific jobs or duty stations.

To help the recruiter do this, the Marine Corps developed a series of pamphlets and videos to serve as sales aids. These sales aids accurately represent the Marine Corps and emphasize the warrior aspects of being a Marine. For example, our boot camp video, which every applicant must see, accurately and vividly depicts the rigors and challenges of Marine Corps Recruit Training. Furthermore, every Recruiting Substation has a copy of "Warriors From the Sea," a video which faithfully portrays Marines as warriors in conflict -- the Marine Corps of the 1990s. There is no doubt that service in the Marine Corps could require participation in combat.

Recruiters have a vested interest in the future success of their prospective recruits. Consequently, they tell it like it is and work hard to prepare future Marines for the rigors of recruit training and subsequent assignments. The advertisements and sales aids that support our recruiters are faithful to this

idea. They are accurate, truthful, and realistic in the benefits, ideals, and facts which they convey about the Marine Corps.

The Future

Your wisdom in supporting our emphasis on recruiting quality during the past decade is readily apparent by our success in Southwest Asia.

For the future, preserving and perpetuating our quality standards and recruiting success will require the proper combination of leadership, training, dedication, and resources. These are important investments, because as was aptly stated by a previous Commandant "future victory in battle depends on our recruiting success today."

Well, despite our past successes, I am keeping a wary eye on the future of recruiting. I sense that the mission I give my recruiting service each year is becoming increasingly more challenging for several key reasons:

- Qualified Military Available (QMA) continues to decline causing increasing competition for diminishing numbers of quality applicants.

- We have indications that some school boards are willing to deny military recruiters access to high schools and student lists

-- actions that are detrimental to the continued success of the all-volunteer force concept.

- In fact, several states, approximately 38%, still refuse us access to their lists of 17 to 24 year old licensed drivers for use in our direct mail program.

- As we proceed with force drawdown we are watching youth attitudes closely to see the affect on recruiting.

- With increased competition, fewer available resources and no paid media in fiscal year 1992, I am as concerned as you are with the extra pressures we are putting on our recruiters and the effects of those pressures on recruiter quality of life.

Failure to consider and counter the negative implications of these factors will affect the quality of our future accessions and the ability of our recruiters to complete their missions successfully. Our plans for accomplishing the recruiting mission consider these factors very carefully. Our ability to counter their effects depends, however, on our effective and timely use of proven recruiting, marketing, and advertising programs. Your vital support of those programs in the past has made the difference and we ask that your support continue in the difficult year ahead.

Summary

In closing, I again want to thank you. We are genuinely grateful for your past support and appreciative of your interest in recruiting issues. For the future, we firmly believe that there are still sufficient numbers of brave, patriotic, young American men and women who will respond to the call for service to their Country -- as U.S. Marines. We will have to work hard to get them, and with your continued support we are fully prepared to do that.

As in the past, we shall take whatever resources are allocated and use them prudently. Despite the hurdles we may face, however, we will lean into it and do our utmost to meet the demands of the future with the same tenacity, zeal, and sense of purpose that have been our hallmark for over 215 years.

IMPACTS OF OPERATIONS DESERT SHIELD AND DESERT STORM ON RECRUITING

- UNCERTAINTY OF WHAT WOULD HAPPEN IN SWA INCREASED RETICENCE TO ENLIST
- MEDIA FOCUS ON RECRUITING CHALLENGES/DIFFICULTIES HAS HAD A NEGATIVE IMPACT ON RECRUITERS' PERCEPTIONS AND ATTITUDES
- QUALIFIED WALK-IN TRAFFIC HAS DRASTICALLY DECLINED
- FALSE PERCEPTIONS, E.G., ENLIST TODAY, GO TO SWA TOMORROW ARE HAVING A NEGATIVE AFFECT ON PROPENSITY PROPENSITY TO ENLIST
- INCREASED LEVELS OF RECRUITING ACTIVITIES, E.G. PROSPECTING, SCREENING, INTERVIEWING AND PROCESSING, ARE REQUIRED TO MEET ENLISTMENT GOALS
- THE REQUIREMENT FOR A GREATER LEVEL OF RECRUITING ACTIVITIES IS STIFLED BY LIMITED RECRUITING AND ADVERTISING DOLLARS
- THE DEGRADATION IN RECRUITER SUPPORT PROGRAMS REDUCES NEW CONTRACTING BY AN ESTIMATED 11% AND IS AN ADDITIONAL BURDEN ON RECRUITERS
- TIME FROM FIRST CONTACT TO ENLISTMENT IS INCREASING AS POTENTIAL ENLISTEES WANT TO 'THINK ABOUT IT' LONGER
- A 'CHANGE OF HEART' AMONG PROSPECTS HAS OCCURRED MORE OFTEN THROUGHOUT THE PROCESSING CHAIN
- INCREASED ATTRITION FROM THE POOL
- PARENTAL CONSENT IS MORE DIFFICULT TO OBTAIN; EVEN PARENTAL APPROVAL FOR THOSE PROSPECTS OVER 17 YEARS OF AGE IS NOW MORE OF AN OBSTACLE
- INFLUENCERS ARE LESS INCLINED TO OFFER POSITIVE RECOMMENDATIONS ON ENLISTMENT
- SCHOOL BOARDS AND HIGH SCHOOLS ARE BECOMING INCREASINGLY LESS COOPERATIVE. MANY NOW BAN MILITARY RECRUITERS ALTOGETHER

ENCLOSURE (1)

Thank you, sir.

The CHAIRMAN. Thank you.

General Salvadore.

**STATEMENT OF BRIG. GEN. JOHN J. SALVADORE, COMMANDER,
AIR FORCE RECRUITING SERVICE**

General SALVADORE. Mr. Chairman, distinguished members of the committee, I am pleased to have this opportunity to appear before this committee to discuss Air Force recruiting and our ability to sustain an all-volunteer Air Force.

I have provided a copy of my prepared statement for the record. Let me summarize by saying that the Air Force recruiters continue to provide the well qualified young men and women we need to fulfill our Total Force manpower requirements.

Although each Air Force component experienced some difficulty at the beginning of the fiscal year, current recruiting trends, as the other services report, are positive, and we are confident that we will make our enlisted recruiting goals this year.

The one important area where we are having difficulty involves the recruitment of health care professionals. Some of the difficulties—and I underscore “some”—have to do with the fact that 15 percent of our Active Duty medical officers each year come from Reserves. As the services recalled medical personnel from the civilian sector in support of Desert Shield and Desert Storm, this source of Active Duty applicants became temporarily unavailable. In addition, some medical schools and hospitals experienced manpower shortages, and, as a result, our recruiters in some cases are not as welcome as they once were. Be that as it may, recruiting health care professionals has always been a challenge. It will remain our number one challenge in the future.

As we examine our ability to sustain an all-volunteer force, we are convinced that Air Force recruiting can continue to meet the Air Force's needs at currently projected accession levels. This year, Air Force's recruiting absorbed a 32 percent reduction in funding from the President's budget, which in turn required us to cut recruiting advertising by nearly 60 percent in order to ensure Air Force recruiters had the support they needed.

Our continued success will depend on being in the marketplace to convince future prospects that the Air Force can provide the right incentives. In this respect, we are aware that some of the concern about recruiting focuses on advertising. The Air Force's consistent message has been to encourage young people to set high goals for themselves by serving their country in the Air Force. Our “Aim High” theme which we have used since 1982 underscores that message.

We believe our advertising as well as the way we recruit accurately portray the Air Force mission so applicants can make informed decisions.

Mr. Chairman, members of the committee, thank you for this opportunity to discuss Air Force recruiting. We believe that we have recruited, trained, and fielded the highest quality Air Force in the world. We also believe we have recruited these men and women with accurate and realistic advertising. We have provided them

with training, with educational opportunities, and a good quality of life, and, most importantly, with an outstanding opportunity to serve their country. With your continued support, we will sustain our record of meeting Air Force's accession requirements with well qualified, motivated young Americans.

That concludes my statement, sir. I would be happy to answer any questions.

PREPARED STATEMENT OF BRIG. GEN. JOHN J. SALVADORE

MR CHAIRMAN AND MEMBERS OF THE COMMITTEE. I am pleased to have this opportunity to appear before this Committee to discuss Air Force recruiting and our ability to sustain an all-volunteer Air Force.

The possibility of conflict last year prompted discussion about the military Services' ability to recruit and retain high quality people. This discussion has continued throughout Operation Desert Storm. There have been questions about whether some segments of our society--specifically, minority group members and the poor--carry the primary burden in any conflict. There has also been some discussion about whether the Services' advertising efforts clearly articulate the nature of our missions. I can assure the Committee that the Air Force continues to recruit and retain sufficient numbers of well-qualified, dedicated individuals to meet our total force requirements, that the demographic and socioeconomic mix of new recruits reflect a representative cross-section of the American population, and that our advertising themes and the image we portray accurately depict Air Force missions and lifestyle. Let me address each of these areas.

We understand there is some concern about the impact of Desert Storm on our recruiting efforts. It is true that we have had some difficulty recruiting for our enlisted force this year. Despite an unusually low accession goal of 30,000 recruits for fiscal year 1991, we experienced a shortfall of about 60 new

enlistment contracts for our delayed entry program in the first quarter of the fiscal year. We cannot directly attribute this to any specific factor. In the past year, we have reduced our enlisted recruiting force in response to reduced accession requirements and a reduced recruiting budget. We have also put increased resources against our most difficult and critical requirement--the recruiting of health care professionals. Additionally, the first quarter of the fiscal year is typically more difficult for us.

In an effort to determine if Operation Desert Shield was affecting our active duty recruiting efforts, we conducted a national telephone survey in November of 139 randomly selected recruiters. We repeated this survey in January. Over 70 percent told us they believed that Desert Shield had a negative impact on their recruiting efforts; seven percent thought there had been a positive impact. Since the beginning of Operation Desert Storm, however, we believe that this reported negative impact has reversed itself.

Since January, all of our leading indicators of new contract production are positive. We administered mental tests to almost 700 more potential enlistees this January than last January, and a significantly greater percentage of those applicants who tested this year passed the test; these trends have continued through April. We are also administering more new enlistment physicals, a

good indication that the increase in testing will result in more new contracts.

One area that continues to concern us is our ability to recruit health-care professionals. Despite the additional resources we have devoted to physician and nurse recruiting, our application flow in these critical areas dropped significantly in December and January (and has not regained momentum as Operation Desert Storm reached a successful conclusion.) We attribute this drop to the impact of Reserve and Guard activations. Our recruiters are not as welcome in civilian hospitals and medical schools, many of which are under stress because of these activations. In addition, we normally fill 15 percent of our active-duty physician and nurse requirements from those members of the Reserve and Guard who choose to convert to active-duty status; this pool of potential volunteers virtually vanished with the onset of hostilities in Southwest Asia and has yet to reappear.

Our ability to sustain an all-volunteer active force necessarily depends upon the accession levels we are expected to achieve and the resources we are given to meet those levels. We project our near-term enlisted objectives to remain near 30,000 per year for fiscal years 1991 to 1993, then to increase to 31,400 for fiscal year 1994, 37,600 for fiscal year 1995, and 49,700 for fiscal year 1996. End-strength limitations dictate these requirements. We expect that our health-care accession levels,

and our other officer requirements, will continue at approximately their fiscal year 1991 levels.

Air Force Recruiting will meet the Air Force's needs at these levels. This year we experienced a 32 percent reduction in funding from the FY91 President's Budget, which in turn required us to cut recruiting advertising to insure our recruiters had the direct support they needed to do the job.

Beyond the active force, the Air Reserve Components have also experienced a decrease in recruiting results--total production is down 30-40 percent from last year with much of this reduction attributable to programmed decreases and Desert Storm. Since Desert Storm, the Air National Guard's production has been on the increase. All units report that a few candidates have withdrawn applications for enlistment or assignment. Active duty Stop-Loss programs also had an impact. Historically, about five percent of those separating from active duty choose to join the Air Force Reserve; this pool is now reduced, at least temporarily. Overall Air Reserve Component recruiting activity remains strong; recently recruiters have been reporting increased interest in joining. Further, quality of applicants remains high. Just as with the active force, we expect that recruiting and retaining health-care professionals will present the greatest challenge to our Reserve Component forces. Since historically we should anticipate that Reserve Component recruiting will become more difficult as units

are released from active duty, recruiters are stepping up efforts to ensure we meet our programmed end strength goal this year.

At this point, we are unable to identify any effects of Desert Storm on retention. Active duty Stop-Loss programs mask short-term retention impacts. Within the Air Reserve Forces, overall losses are down only slightly from last year. Historically, retention is affected in Reserve units recalled to active duty once the units are released from active status. We expect that the traditional pattern of increased losses will probably continue in Air Force Reserve units. However, the Air National Guard does not expect a significant loss as a result of Desert Storm.

We recognize that some of the concern directed at military recruiting as a result of Desert Storm focuses on our advertising messages and whether we accurately convey what it means to be a member of the Air Force. Our consistent advertising message has been to encourage young people to set high goals for themselves by serving their country in the Air Force. Our "Aim High" theme--which we have used since 1982--underscores that message. We believe our advertising, as well as the way we recruit, accurately portrays the Air Force mission so applicants can make informed and mature decisions. For example, the brochure we give to high school students notes that we are looking for people who believe

in what they are doing for their country. We include a copy of the oath of enlistment in the brochure. In addition, in all of our advertising--photographs, public service television, direct mail, collateral material, etc.--we use Air Force people, not professional models. Most of this material is produced at the actual site where the work is performed; our coverage of the Air Force work environment emphasizes real, not staged, situations. Our theme will continue to emphasize opportunities available for young Americans while they fulfill the obligation of serving their country. It is interesting to note that youngsters joining the United States Air Force list service to country as one of their top reasons for enlisting.

We use a wide variety of media to reach our audience. At the national level, we use high volume periodical ads, public service television, paid and public service radio, and an aggressive direct-mail campaign to generate leads for all programs. Extensive local advertising and direct mail programs stimulate office traffic in specific cities or regions as required.

Our mix of paid and public service media is targeted to reach as many prospects as we can for the lowest possible cost. For example, our traditionally small advertising budget does not allow us to buy television; however, we have a strong and aggressive public service television program which provides an average of three to five million dollars worth of free television air time

annually. Decisions about the mix of media are made using standard industry yardsticks such as reach, frequency, and cost per thousand. In summary, Air Force advertising over the past ten years has been consistent, focused, accurate, and executed at the least possible cost.

Mr Chairman, and members of this Committee, thank you for the opportunity to discuss the effects we have seen on Air force recruiting as a result of current operations in Southwest Asia. We believe that we have recruited, trained, and fielded the highest quality Air Force in the world in support of this operation. Recruiters for both active and reserve components are committed to sustaining our strong tradition of placing qualified men and women in uniform without regard to racial or socioeconomic background. We attract these men and women with accurate and realistic advertising; we provide them with training, educational opportunities and a lifestyle that allows them to fulfill their potential while serving their country. With your support and the continued support of the American people, we will sustain our record of meeting Air Force accession requirements.

The CHAIRMAN. Thank you.
Admiral McKinney.

**STATEMENT OF REAR ADM. HENRY C. MCKINNEY, COMMANDER,
NAVY RECRUITING COMMAND**

Admiral MCKINNEY. Mr. Chairman, thank you, you and the members of the committee, for allowing me to be here today to address Navy recruiting. I certainly appreciate from the Navy's standpoint the strong support that this committee has given to the Navy over the years, and particularly Navy personnel programs.

I would echo the comments of my fellow recruiters up here that certainly Desert Shield and the fall was a difficult recruiting time. We did miss new contract goals. We were able to put enough people into the Navy of the highest quality that the Navy has ever recruited, but we were struggling with our new contract requirements.

That continued on until January. There is no question that the shift from a Desert Shield preparation for war to a situation of combat changed the attitude of the country. Certainly the support of the Congress behind the President made an enormous difference to Navy recruiting as well.

Recruiting since then has not been easy, but it has certainly been one of goals that we have been able to make, and I am pleased to report that I see this year Navy as being extremely successful.

We are phasing down, and that was talked to with the earlier panel. We are headed toward a smaller Navy. We are recruiting 75,000 people this year as opposed to 95,000 just 2 years ago. Does that mean recruiting is easier? Does that mean our job and our recruiters have an easier time of it? Twenty thousand fewer people to recruit this year. Well, that 20,000 people, from the Navy's standpoint, is a very small difference in terms of the difficulty of recruiting. That 20,000 people that we are not recruiting this year represents 10,000 mental group 4 that we are not recruiting this year. It represents about 6,000 high school dropouts that we are not recruiting this year and about 4,000 prior service individuals that we are not recruiting this year. Each of those categories—the mental group 4, the high school dropout, or the prior service individual, a naval veteran—is a fairly easy recruiting effort. They are a walk-in market. Recruiters don't work to find those people; they find the recruiters.

We have not changed our mission at all with regard to upper mental groups, high school graduates, high quality individuals. This is a new era for the United States Navy. In the past, we did recruit 12 percent mental group 4's, we did recruit 10 percent high school dropouts. The Navy is not doing that now. We are now approaching our fellow services' Air Force standards and Army standards. The Navy in the past has been unable to meet those quality standards for some very simple reasons, primarily underfunding. Navy recruiting is the least well funded of the all the recruiting services. It has been difficult for us. We do not have a strong advertising program.

I am a submariner in addition to being a member of the Navy, and we have always prided the submarine force as being the silent service, but, in fact, to the large part of America the United States Navy is the silent service. You will hear this afternoon from one of my recruiters from Rapid City, South Dakota, Petty Officer Snyder. There is no Navy in Rapid City, South Dakota. In fact, when Petty Officer Snyder joined the Navy some 6 or 7 years ago, he first tried to get in the Air Force because Ellsworth Air Force Base is right nearby, and that seemed like a reasonable option for him—stay at home, be part of a good service. But the Air Force didn't accept him because he was a high school dropout. He joined the Navy. But he was leaving home to join the Navy. He had to go to San Diego, to go to a ship, to go away.

That is how the youth perceives the Navy today—ships, sea duty, family separation, a difficult life. It hasn't changed over the centuries. Certainly the era of Admiral Nelson and the history of the navies of the world, it has always been that—family separation, a long time at sea. That has not changed today. So it is difficult to get the right message across to our youth, and, as a result, we rely or need to rely on more and more positive images about the Navy. What does the Navy offer? Very high-tech, excellent training in a quality organization. That is why we think Navy advertising is so fundamentally important.

You will see some ads today which reflects Navy's advertising of a year ago. You will not see ads reflecting any change after Desert Storm because Navy is not advertising on television. We don't have the money. It was cut out a year ago with the prospects of a downsized Navy. This is a big problem for us and I think will continue to be a problem until Navy can once again project its message on television and in the national media.

As a result, I think, and I would echo General Wheeler's comments, when you take advertising away from recruiting, you put the load on the recruiters' backs. They have to work that much harder to generate those four, six, eight, 12 interviews to get one prospect. So that is what concerns me tremendously as we face the future. We need strong support from your committee and from the Congress in providing the necessary recognition of the services in a recruiting mode.

But we do have other opportunities to show the Navy to the country. Certainly the Great Lakes cruise, which is an annual event, is one way that we get the Navy into middle America, albeit only to those States that are contiguous to the Great Lakes. But it is an opportunity for 200,000, maybe 300,000, people who would not otherwise have an opportunity to visit a Navy ship and see what sailors are all about. We appreciate your continuing support in that regard, Mr. Chairman, and look forward to once again visiting the great State of Wisconsin.

We also have about 100 or so ship visits every year to various ports on the various coasts, not Navy ports. We have Navy awareness through the Blue Angels and other demonstration teams, Navy bands, parachute teams, all important to us, but a good part of that comes out of the recruiting budget, so, again, it is important that we continue to focus on supporting of recruiting.

I guess I would finish by a recruiting message that has always made a lot of sense to me, and it was said many years ago. The message is, "Sign on, young man, and sail with me. The stature of our homeland is no more than the measure of ourselves. Our job is to keep the torch of freedom burning for all. To this solemn purpose we call on the young, the brave, the strong, and the free. Heed my call. Come to sea. Come sail with me." John Paul Jones said that over 200 years ago. It is still the Navy's message.

Thank you, sir.

PREPARED STATEMENT OF REAR ADM. H.C. MCKINNEY

Mr. Chairman and distinguished members of the Committee, it is both my privilege and distinct pleasure to appear before you today in my capacity as Commander, Navy Recruiting Command to discuss with you the status of Navy recruiting as I see it in light of recent world events and changing force structures.

As the FY-90 recruiting year drew to a close, anticipated force reductions led to reduced accession requirements of about 10 percent in FY-91.

With a strong Delayed Entry Program of more than thirty-three thousand, or forty-one percent of the FY-91 accession requirements, the Navy was finally in a position to plan a strategy to provide for necessary increases to fleet quality for the long term. As we phase out the older fleet platforms, the Navy will consist primarily of gas turbine and nuclear power ships. That fact alone has significantly increased our requirement for high quality personnel.

In the recent past, when Navy Recruiting was asset limited in terms of manpower and financial support, we have been forced to take more non-high school diploma graduates and aptitude category IV accessions than the other services in order to just meet end-strength requirements.

The lack of a healthy Delayed Entry Program in the past precluded us from adequately focusing on high quality

individuals. We began FY-91 by setting our standards higher than ever before: 95 percent high school diploma graduates, 62 percent upper mental groups, and no accessions from Aptitude Category IV.

We recognized the difficulties inherent in this plan. The fewer resources available due to budget and manpower reductions meant our recruiters were facing a tough challenge which I nevertheless believed to be achievable.

The impact of Operation Desert Storm has made our job even more difficult than predicted. Last fall, recruiters reported a significant reluctance on the part of parents to permit their sons and daughters to join the Navy.

Since September 1990, we have seen a remarkable decrease in response to our national direct mailings, in comparison to the response rate of previous years. These decreases range from 11 to 60 percent. Additionally, our recruiters were having less success in convincing those who did respond to join the Navy.

In fact, for the first half of FY-91, Navy recruiters have only been able to convince 61 percent as many respondents to enlist as compared to last year. Despite this decrease in response to our national advertising direct mailings, and more difficult recruiting environment, Navy recruiters have so far been able to maintain our high quality standards.

There is no doubt increasing quality standards will pay long-term dividends: reduced attrition and the associated training costs, increased skill proficiency, and vastly improved operational readiness will all be gained by this measure.

Our FY-91 recruiting strategy is primarily based on two factors; the first of which I've already mentioned, to increase the quality of sailors assigned to the Fleet. The second is to continually improve the quality of life of our recruiters.

We have made great strides toward this end. Recruiting has always been known as tough duty, and it had a reputation as duty that no sailor wanted. By emphasizing the importance of time with families, professional and personal development, and most importantly, by opening a channel of true two-way communication up and down the chain of command, I believe the quality of life of our recruiters has changed dramatically.

Sailors in the fleet are beginning to see recruiting as a challenging but rewarding assignment and we have achieved over a 90% volunteer organization---a dramatic turnaround of the situation just two years ago when only about 35% volunteered.

In short, I have a motivated and skilled recruiting force in place which will meet all quality and quantity parameter requirements for FY-91 and build a satisfactory Delayed Entry Program pool of men and women for FY-92. Navy Recruiters will

continue to meet the increasingly more difficult recruiting environment that they face if they have the support that they need. A strong Navy Awareness and Advertising Program is an essential element in this support.

I would now like to briefly describe the major strategic elements of our advertising program. Navy's advertising is an important part of the successful attainment of our recruiting goals. The success enjoyed in FY-90 was greatly enhanced by the focus of advertising on high tech training.

A large percentage of the nation's youth is unfamiliar with the Navy and it's mission, and may make career decisions as they graduate from high school and college without considering the Navy as an option. Navy advertising shows them this option is there.

We want them to know that the Navy is a modern, high-tech organization where they can develop professionally and personally while they also serve their country.

We make every effort to ensure Navy advertising is technically correct, accurately portrays life in the Navy and shows activities which are typical in our operational forces. We believe we have accomplished these aims in all our advertising.

Navy advertising consists of two major programs, a national program and a local program.

The national program is directed from my headquarters here in the Washington area and consists of television and/or radio, as funds permit; as well as magazines, direct mail and pamphlets for use by our recruiters. Most of the national effort is focused upon building Navy awareness, and we concentrate our efforts in the Fall and Winter when new television shows are released and viewer levels are highest.

The local advertising program compliments the national program and consists primarily of classified newspaper advertising and direct mail, on a year-round basis, to provide leads for Navy recruiters. However, the local advertising program provides only bare bone results and does nothing to enhance the Navy's image.

Combined, the two programs have been very effective, and in FY-90, resulted in more than 17,000 enlisted accessions and 880 officer candidates.

Navy's advertising media selection is strongly influenced by budgeting limitations. We believe television is the best method to inform the nation's youth about the Navy and to establish a favorable image. Because of its combined visual and audio presentation, television permits a great amount of information

to be presented effectively in a short period.

When TV is beyond our budget limits, radio must be used, although we have found that a mix of TV or radio, combined with print (magazines and newspapers), is the most effective means of reaching a large percentage of the nation's youth in a cost effective manner. The combination of TV, radio and print is considered essential to our continued success, and vital to informing our nation of the Navy and its opportunities.

In addition to our paid advertising program, we have a number of major Navy awareness programs which bring the Navy before the public.

These include literally hundreds of port visits by Navy ships each year, with public visiting that reaches hundreds of thousands. The annual Great Lakes Cruise by a ship dedicated each summer to public visits throughout the Great Lakes, is an example.

In addition, we have a Navy Balloon Team and a Navy Parachute Team which perform at public events across the nation. Our Navy band and all its components are on the road constantly performing for the public.

Probably everyone in this room has seen the Navy Flight Demonstration Team the "Blue Angels." They are one of our finest awareness efforts. And finally, we have an aggressive public service advertising program consisting of television, radio,

newspaper and billboard advertising which supplements our paid advertising efforts.

Our strategy for the coming year is a sound one allowing for a diversity of options. I am confident we will continue to meet the requirements of the Navy despite the more difficult recruiting environment, while providing the highest quality sailors the Navy has known in the history of the all-volunteer force.

The CHAIRMAN. Thank you, Admiral McKinney, and thanks to all of you for being here today and for your opening statements.

Let me just ask, is the general outline essentially the same for all of you—that there were difficulties in the fall; when the war started, it eased a little bit; the long-term implications we don't know yet; but it is still fairly tough out there recruiting. I take it that you are all finding that you have to see more people in order to get one to sign up—true of all of you? Yes.

Why aren't we getting a better pop out of the war than that? I would have thought a successful war with very few casualties would make it easy right now. I guess the thing makes sense up until the post-war. I can understand why in the fall it was tough, and I can understand that when the war came there was a little bit of a surge of patriotism, but why isn't it really easy right now?

General WHEELER. Mr. Chairman, if I could open up the discussion on that particular point, I think there are two factors. The first factor is the fact that it may be a little bit too early to call that shot.

During the month of April that just ended for us this past Monday, we did see an increase in our contract write rates and the quality market actually exceeded fiscal year 1989's April over the same period of time, and that was with more than 800 fewer recruiters that we have recruiting today than we had in April 1989. So it may be a little bit too early to tell on the first point.

The second point is the seasonality of recruiting. At present, we have a large number of young seniors who, in all candor, are looking toward that prom which is of more importance to them than signing a contract with the United States Army.

I think I am speaking for the other services when I say that we are in a down time for recruiting during the months of April, May, and indeed during the month of June. But notwithstanding that fact, we saw during the month of April a very, very good month from an Army perspective.

I think that as we go through the fourth quarter of fiscal year 1991 we are really going to see the pay-off for the dynamite success of our soldiers, sailors, airmen, and marines in the desert.

Admiral MCKINNEY. If I could add to that, I think from the Navy's perspective there was a tremendous surge of interest in signing up, particularly as the war started, and it is still there. But today's military is very selective, and those walk-ins aren't qualified, and we are still having to work very hard to get that high quality kid, the one who is graduating from high school, or he has already graduated, and he is bright enough, he has got a good job, he has got good employment. He is not walking into a recruiting station; he is well looked after.

We did get a lot of walk-ins, an awful lot of interest. They had crime records, they were into drugs, or they just didn't make the mental qualifications to come into our military today, sir.

General BROWN. As I mentioned before, sir, we did have a lot of interest, a lot of former marines, a lot of folks that were just a little bit too old, and, again, a lot of those other problems. We also in Marine Corps recruiting are in a little bit of turmoil right now, because we had to change from a high school market during this thing into a graduate market—the youngsters who have already

finished high school. So we are now getting back into the high school market. We have missed talking to a lot of those youngsters early in the year, and as we get back into the high schools I think we may see some benefit from this.

The CHAIRMAN. Before we go to General Salvadore, why were you not in the high school market last year?

General BROWN. I think General Thurman hit on it, sir. The influencers when this thing started, especially because of the uncertainty—the fear of casualties, excessive casualties, and the fear of chemical warfare—parents, teachers, counselors, they would counsel high school seniors especially, “Just wait and see what happens. Don’t jump into this.”

The CHAIRMAN. I see. OK.

General BROWN. That was our problem. It wasn’t a problem convincing and recruiting the high school seniors; it was the influencers that were having the effect.

The CHAIRMAN. So when you say “getting back into the high school,” you mean talking to the high school seniors, in their senior year.

General BROWN. Yes, sir. We are changing back into that market now.

The CHAIRMAN. I’ve got you.

General BROWN. I am hopeful that we will see some results.

We also did a survey, sir, and we found that when we asked them how the Gulf war affected their propensity to enlist, we found that 21 percent thought the Gulf war made joining the Marines more appealing, 34 percent said less appealing, and 44 percent said it didn’t make any difference. Now when that washes out, I am not sure when we finish all of our studies what that is going to tell us.

The CHAIRMAN. Give me those figures again.

General BROWN. Twenty-one percent think the Gulf war makes joining the Marines more appealing, 34 think it is less appealing, and 44 percent say it had no effect on their thinking as far as joining the Marine Corps. So we are struggling with those figures now, trying to see what that tells us.

General SALVADORE. I would like to echo General Brown’s comments. Moms and dads, teachers, expressed great trepidation in the fall; 62 percent of my recruiters said it was harder to recruit in November and December than it was in the previous November and December.

We saw a surge in January, tested about 4,700 youngsters, 700 more than we did last year, but large numbers of those youngsters aren’t qualified for the United States Air Force, so we disqualified large numbers. For the United States Air Force, April, May and June are especially difficult months.

The CHAIRMAN. Admiral McKinney, you were mentioning some numbers on high school dropouts. What was that percentage in the Navy?

Admiral MCKINNEY. Yes, sir. For most of the eighties, Navy was recruiting around 88 to 90 percent high school graduates, 10 percent were dropouts, and 12 percent of what we were recruiting were also mental group 4’s. Now each mental group 4, the lowest mental category allowed to come into the military, must be a high

school graduate. So those two groups are mutually exclusive. If you are a mental group 4, you are a high school graduate. So there was a totally other group which were nongraduates. So that made up roughly 22 percent of what Navy was recruiting in most of the eighties, in that category, much higher in those categories than our sister services.

Today, we are recruiting 95 percent high school graduates, and we have eliminated mental group 4 recruiting; we are not recruiting any more. We have been able to accomplish that with this decline that we see in the Navy end strength, and we are no longer recruiting 95,000, we are now recruiting 75,000.

I might also add—and I am sure that General Thurman's comments earlier are right on the mark there—as we go to a higher quality Navy, we are going to see an increased retention a lot less attrition, of the individuals who really shouldn't be in the service to begin with, the ones that are not high school graduates or typically the ones that drop out early; they are the ones that are trites. The mental group 4's are difficult to train and give them a meaningful job in the military.

So the Navy has turned the corner. Reluctantly, the last of the services represented here today has turned that corner, but it is because in the past we really couldn't make it and make our numbers without going for that lower quality group.

The CHAIRMAN. Let me see if I understand what each of you are doing in the way of advertising.

Admiral McKINNEY, you are saying the Navy is not doing any paid advertising now at all.

Admiral McKINNEY. There is no television advertising. We are still advertising in magazines and in newspapers, and I might also add that we track pretty carefully, of the people that we recruit, whether or not they showed up as a result of advertising—they either read something in a magazine, saw an ad in a newspaper, or when we were on television, they made a toll-free phone call to the Navy local number. That follows up as a lead, and the recruiter ends up with a lead to call that individual, and ultimately it may result in a contract.

Twenty-three percent of Navy's contracts are the result of advertising leads. That is how important advertising is to us on a day-to-day basis.

The CHAIRMAN. Are you getting any free advertising in the sense of somebody donating the time?

Admiral McKINNEY. Yes, sir. That was mentioned in the earlier panel, and we all participate in that. Public service announcements are a valuable tool for us, and I think we would all agree here, but I will speak for the Navy anyway. Public service announcements are up to the individual television station to put on. We work hard to convince them to please put it on for us. They do, but typically it is on off-peak hours. Unless someone is staying up, watching the late movie at two o'clock in the morning, he is likely not to see a public service announcement. They are not at prime time. From the recruiting perspective, we like to get television ads in sporting events and youth-oriented events, and those are not necessarily easy to get public service announcements. That is where you have to pay for it.

The CHAIRMAN. Right.

General Brown, you were saying that you are off the air next year. You are on this year but not next year?

General BROWN. We are on this year. We are paying for this year's national media from last year's budget. We buy it a year ahead of time. I don't have the money this year to buy it next year.

Advertising is very important to us, and we also quantify it, and one of the things we find is that a youngster who has seen our advertising is twice as likely to enlist. Twenty-two percent of our enlistments are directly attributable to our advertising programs.

The CHAIRMAN. General Wheeler, are you on the air this year or next year?

General WHEELER. We are, sir. If you recall, we came off the air actually after the air campaign started, and we have reintroduced primarily a paid public service announcement as well as a pure public service announcement entitled "Freedom isn't free," and we will probably be going back on the air offering options to young Americans some time this summer. It will probably be after the Fourth of July.

The CHAIRMAN. What about the Air Force?

General SALVADORE. Sir, we have never had paid TV, we have always had public service advertising. It is an aggressive program. We go to the cable networks, the major networks, and we use our local recruiters to get local TV stations, if you will, to play this stuff.

We have had paid radio in the past. This year, we are off paid radio because we can't afford it. So we are hawking, if you will, public service advertising for both TV and for radio.

The CHAIRMAN. Is the theme of these ads, either on TV, on the radio, or in print—is the theme of your advertising going to change now because of Desert Storm/Desert Shield? Is the message going to change in any way?

Yes, sir.

General SALVADORE. If I could, we have emphasized the theme, "Aim High"—education and training opportunities and the opportunity to serve—for the last decade. The Youth Attitude Tracking Study that was referenced by the previous panel indicates that 90 percent of high school age males recognize the theme, "Aim High," as Air Force. We don't plan to make any changes except to underscore service to country, perhaps a bit more, but we don't intend to make any changes. It has been very successful for us. We think it is accurate, we don't use actors, and we think it conveys a reality that we are a high-tech trainer, offer good job experience, good education, and the opportunity to get ahead in life.

The CHAIRMAN. General.

General WHEELER. Mr. Chairman, I think a lot of that is going to be predicated upon research that we will be doing during the aftermath of Operation Desert Storm. All the advertising that we do today is predicated on hard facts coming from both youth attitudinal surveys as well as new recruit surveys.

Just to give you an example, in 1988 we found that the youth of America perceived that we in the Army were not civilian career relevant. We changed our campaign, introduced a new one in January 1989, and by that fall, the 1989 Youth Attitudinal Survey was

conducted, the advertising had had a very, very positive impact on the youths' perception of the Army.

So I think that a lot of what we are going to be doing in the Army is going to be predicated on future research. I think, though, today, based on polls that we have conducted subsequent to Desert Storm, that the notion of a Willie and Joe image has certainly dissipated in the minds of American youth. I think that they perceive us today more so than ever before as being more high tech than what we were prior to Desert Storm.

Admiral MCKINNEY. The Navy has shifted their slogan over several years. Of course, we all know it used to be, "It's not just a job, it's an adventure." "Join the Navy and see the world; live the adventure" were themes that the Navy had in the seventies and into the early eighties. That clearly, as a result of our research, was the wrong message to today's youth. Today's youth is looking for fulfillment, they are looking for training and self-development. The Navy shifted to a slogan a few years ago, "You are tomorrow; you are the Navy," and that worked for a while but didn't really have a strong Navy message.

Today, much like the Air Force's "Aim High," today's message, "You and the Navy, full speed ahead," is our message. It is focused on the development of an individual as he joins the service. We developed that ad a year ago. With the limiting advertising funding we have at this point, we would not contemplate changing the ad, because it costs money to build a new ad. We would just like to get that ad back on television, sir.

General BROWN. We are going to stay with our present theme, "The few, the proud," which is a change from a few years ago of "A few good men." We are going to stick with the intangibles.

We are making a rudder change to our advertising approach. We started this before the Gulf war, and what we want to do is add to our image of "tough elite." We think that we have got to appeal to not only the tough guys but the smart guys, because as the market grows smaller competition gets more intense, and as the force draws down we are going to have to be more versatile. So you will see our new ad saying, "You have to be tough to compete, but you've got to be smart to win," and that is the change, but that came before the war.

The CHAIRMAN. Let me ask one final question and then yield.

If you had a little bit more money, what would you put it into? Would you put it into the advertising? Would you put it into more recruiters? In other words, what would be your budget priority here if you had more money for the whole area of recruiting? What is the best pay-off for additional dollars?

General BROWN. Well, as General Thurman said, you need a holistic approach to recruiting, and I don't have that now because I don't have any advertising next year, my advertising is broken, and I would put it at this point into advertising.

The CHAIRMAN. So you would get some advertising on the air if you have the money.

General BROWN. Yes, sir. I think I am in pretty good shape with recruiter support.

The CHAIRMAN. General Wheeler, what would you spend it on?

General WHEELER. Mr. Chairman, it would be split into two areas: one, recruiter supporter; that is to support the individuals. With a reduced number of recruiters that we have and are going to have in the future, that would probably be one split. The second split would be increased advertising.

The CHAIRMAN. Support means what for the recruiter?

General WHEELER. It would be a combination, sir, of communications, vehicles, not having to put vehicle mileage targets on them, additional educator tours as an example where the educators throughout America can see what the Army really is like, support for funded DEP functions where we can keep a tag on the young Americans that we have already contracted, to keep their interest high, where that recruiter is not going to have to go back and re-contract and resell another individual. That sort of thing is what I am talking about, sir, with respect to recruiter support. Then advertising, making that recruiter's job easier for them, to spark the interest to cause that recruiter to have opportunity to tell those dynamite young Americans about the United States Army.

Admiral McKINNEY. The Navy is also split on this, I think, Mr. Chairman. You will hear this afternoon from my Petty Officer Snyder in Rapid City, South Dakota, that last year we had to make the painful decision that we could not afford to fly individuals from Rapid City, South Dakota, to Sioux Falls to go through the military processing as the other services are currently doing. We either had to put them on a 10-hour bus ride or ask the recruiter to drive them to Sioux Falls from Rapid City in order to get them as a new contract. That is really because we had run out of money in order to fund that. That is not isolated to just South Dakota; we have had to make those difficult decisions all over the country.

So, as a result, if we were to get more money, certainly some would go into the operations budget, but, as I have indicated as well, Navy is very deficient in national advertising, and I would certainly use probably the majority of the money, if we were to get it, to get back on television.

General SALVADORE. We are about the same, sir. We would put a few dollars back into operations for vehicles, for some limits we have put on vehicles, some supplies and equipment that we are not buying that maybe we ought to buy over the long run. But, for the most part, I would put money back into advertising.

We have cut our periodical budget by 50 percent; we are out of the paid radio; we have cut that by 100 percent. I would put some more money into direct mail. National advertising is of the utmost importance to us, and you can't measure results today because it is a passing parade you are trying to capture; you only see the results in the future.

The CHAIRMAN. Beverly.

Mrs. BYRON. Thank you, Mr. Chairman. I am afraid, had I asked your last question, I might have phrased it a little bit differently and would have had to ask: if we took more money away from you, what would you have to cut back on? I think that is the situation mode that we will be facing.

I have a multitude of questions, and I think one of the basic ones is: as we look to the youth of America and recruiting, are we look-

ing at the new people coming into the service for the long haul, or are we looking at them coming in for just a few years?

We talk a lot about the benefit packages of education, and when we talk about these benefits with a young individual, they then interpret that as that you just want and need me for the short term and then I can continue on with my life and get my education because the education benefits are there. I think that is a very strong recruiting tool.

Mr. Montgomery was here. We haven't mentioned the Montgomery GI bill as an educational benefit and tool for recruiting at all today, which is unusual for a hearing which has gone on this long.

Another observation—and I think, Admiral, you touched on it—and that is in tracking the category 4's when the service was full of them—obviously, they did not last for the long haul.

General Thurman talked a little bit earlier about the shortfall of NCO's. That ties in with the long haul for recruitment.

General Salvadore, let me ask you, as we cut back on pilot training, and we are talking basically about the initial recruit; I think we also need to look at attracting an officer corps. The high competition for the academies, there is no question on that, but I am a Member who believes that we need a rounded military—not only all academy graduates, but we also need those who come in under officer training. I think we are looking at ROTC individuals who have used the corps as an educational and long-term commitment to the service at a time when we are going to have to tell many of them, "Thank you very much; you now have your degrees, but we do not have a place in the service for you." We are cutting back on pilot training; we are cutting back on the number of cockpits that are going to be available for people who come out of that training. Isn't this going to have an adverse effect on those individuals who have gone into the Air Force with that one glimmer in their eye, to get into the cockpit and to fly?

General SALVADORE. As you know, Ma'am, we have had to reclassify a fair number of youngsters in ROTC who were going to come out as undergraduate pilot trainees because of a lack of cockpits, because they couldn't become pilots. About 50 percent of those who were scheduled for pilot training in their junior and senior year have had to be reclassified.

We have not denied entry to anyone to come on Active Duty; they simply cannot come on Active Duty as pilots, and therein lies the disappointment for these youngsters, and it is going to have some impact. Unfortunately, it was unavoidable, and there are things being looked at now to provide them perhaps a later opportunity to become pilots once they do come on Active Duty, because we realize the disappointment that they have suffered, and, you are right, a good mix of commissioning sources is essential. ROTC, for example, has represented roughly 50 percent of our commissioned officer corps over the years in terms of accessions, and it is an important one, and we need to nurture it and care for it.

Mrs. BYRON. We have put a great deal of money on the officer level to avoid in a shortfall of these critical skills. In the nuclear Navy, for example, we need to make sure that the number of enlisted and officer corps for this highly competitive area is there. Are you meeting those numbers, Admiral McKinney?

Admiral McKINNEY. Yes, we are. "Hunt for Red October" didn't hurt in that regard. It was a movie that focused on the silent service, and although it wasn't on the nuclear aspect of the silent service, it certainly generated a lot of interest in submarines, and we saw, as a result of that, an increased interest in nuclear enlisted.

However, that has never really been—it is a difficult goal, because we are asking for the highest quality enlisted recruiting, and we work hard to keep that quality up, but we have been successful at making it. We use an enlistment bonus. Our largest enlistment bonus that we allow is used to enlist nuclear enlisted personnel.

On the officer side, as you know, we have continued to work hard in recruiting, not only recruiting from the civilian population but as well from the Naval Academy and the NROTC program officers for the nuclear power program. We are making those goals today, and as we look toward the future and a reduced size submarine force, our requirements are also going down somewhat in that area. So we foresee the future as being positive; we can make those numbers.

In response to your question about the long haul, Navy has always focused on the long haul. That has not been an issue for us. We recruit people to come into the Navy for a career.

We have just recently adopted the Navy College Fund, patterned after the Army College Fund, but that is offered to some 2,000 people a year. Of the 75,000 we are recruiting, 2,300 are offered the Navy College Fund. So that is really a small portion of our recruiting message. The message really is, "Training in the Navy for service in the Navy."

General SALVADORE. Ma'am, I would like to echo Admiral McKinney's comment. We don't sell the United States Air Force as a door into the civilian sector, into some private job. We sell Air Force careers, and we are selling careers for the long haul.

We are a service, as you know very well, that offers associate degrees. We can award associate degrees through the Community College of the Air Force. We are in it for the long haul with the youngsters who join up with us.

Mrs. BYRON. What is going to happen as we draw down our total force structure, and individuals in that mid-career position are going to be involuntarily separated? This will obviously have an impact on the young people who are coming out.

General SALVADORE. Right now, Ma'am, I don't know that any specific decision has been made with respect to an Air Force reduction in force, an involuntary separation. We have had an involuntary retirement program for officers, but I don't know about decisions with respect to a reduction in force of enlisted members.

Admiral McKINNEY. If I could just answer for the Navy and then shift it over to the over services, Admiral Boorda, as the chief of naval personnel, has worked very hard to structure this downsizing of the Navy to provide absolute minimum impact on the enlisted community, and at this point he is largely successful.

We do not see a requirement for a large reduction in force of the enlisted community whatsoever, only at the high end, high year tenure kind of issues with those already eligible to retire. Some will be asked to retire early both in the senior enlisted ranks and we have been forced to do that as well in the officer ranks, but,

other than that, we are able to control it with the current accession structure that we are currently working on.

General SALVADORE. The same holds true for the Air Force, Ma'am.

General BROWN. For the Marine Corps, we do not anticipate any RIF's to draw down those in mid-level career positions.

As far as officer recruiting in general, I think we have a very diverse sourcing of our officer programs. We recruit about 1,600 officers a year, and 95 to 100 come from the Naval Academy, about 400 from the NROTC program, and the rest from the PLC and OCS program, and the quality there has been phenomenal. We are talking about up to 1200 SAT scores and 2.8/2.9 GPA's.

Mrs. BYRON. Are we still seeing some officers come out of the ranks?

General BROWN. We are still seeing some officers come out of the ranks. The augmentation board, which considers those young officers—lieutenants, captains—for augmentation in the regular Marine Corps for a career, only about 40 percent of those who would like to stay Reserve officers are allowed to stay. That is necessary because of the pyramid. We have a lot more lieutenants and captains than field grade officers.

As far as the long haul, we do recruit for the long haul. We do not have any of the educational kicker packages. Our first thing in recruiting is to sell the Marine Corps and not job opportunities or technical training.

Mrs. BYRON. General Wheeler.

General WHEELER. Mrs. Byron, essentially the same comments as from the other services. As you know, the Army, when you lay from sergeant major all the way down to private, we look like a pyramid. Our recruiters are selling the Army first, but, at the same time, given our target and our focus on quality today, we are recruiting today the sergeants major for the year 2010 and 2011.

Having said that, however, when we look over the recent years, in any given year we are probably going to retain somewhere between 34 to 41 percent of those initial termers who have completed their first term of service in our career force. That has been voluntary. I think that as we progress through the decade of the nineties we are going to see percentages very, very similar to that. That is not to say that there is not going to have to be very, very detailed management and, indeed, policies from the Army with respect to addressing this recruiting and, for that matter, retention policies, as General Thurman alluded to this morning.

I think that what we are doing today in recruiting is designing a force for the future that we in uniform and this Committee can be extremely proud of 10 and 20 years from now.

Mrs. BYRON. General Wheeler, let me ask—and it probably affects the Army more than the other services because you recruit a larger number of individuals—as we see a fluctuation in the unemployment rate—and currently we are seeing a dramatic increase in unemployment, this has to have an effect on the number of individuals you have to draw from in recruiting—have you see any changes because of the increase in unemployment in the last 6 months or so?

General WHEELER. Certainly we have not from a high school population standpoint, Mrs. Byron. In fact, it is just the opposite. We saw, as has already been alluded to by the other representatives today, that we kind of had to get out of the high school market back in the fall, and even the high school graduates and young men and women with college experience were going to their influencers and seeking advice before they raised their right hand.

Having said that, though, this year, fiscal year 1991, as compared to the same period of time in fiscal year 1990, we have seen an increase in the percent of accessions, nonprior service accessions, who had college behind them—in other years, 1 or more years of formal education beyond high school.

Last year, fiscal year 1990, for the first half, we had about 7 percent what we refer to as high grads. Those are young men and women with 1 or more years of formal education above high school. This year, 11 percent of those that we have contracted during the first half of this fiscal year were high grads.

So I think that we are beginning to see a sign in that particular market segment that the economy may be having an impact. But keep in mind that we have got about 2 months of data right now, March and April. After we analyze April, I might have to tell you that yes, we are beginning to see a change driven by the economy, but at this particular time I cannot tell you that factually.

Mrs. BYRON. Mr. Chairman, I know you want to break for lunch, but I have just one more question I need to ask each of the panelists, and that is: we have had a great deal of discussion on numbers and what is the proper number of females in the service. Could each of you touch on the number of women you are recruiting and the number of women you have within your branches?

General WHEELER. With respect to the Army, Mrs. Byron, this year it looks like we are going to end up with about 15 percent of the nonprior service accessions that we assess will be women, and I would like to provide the precise number of the content for the Army for the record, if I may.

Mrs. BYRON. Thank you.

[The following information was received for the record:]

In fiscal year 1990, females made up 11.4 percent of the Active Army with 11.3 percent of the enlisted force and 11.8 percent of the officer corps being women.

Admiral McKINNEY. With regard to the Navy, we have been recruiting pretty consistently at about the 10 percent level. That is driven primarily by the billets and the positions we have open for women within the Navy, and that has been determined by the combat structure of the Navy, and 10 percent of our recruiting mission is for women. I might add, they are a higher quality with regard to upper mental group, they are all high school graduates, and they all have, I think, in today's Navy a very bright future.

Mrs. BYRON. Will women in combat have a criterion on the number?

Admiral McKINNEY. Certainly. If women went into combat, we would then be in a position where many combat ships which currently exclude women would be open to women. We would have to readjust the structure of the Navy, and we would certainly be recruiting a lot more women than we are today.

Mrs. BYRON. General Brown.

General BROWN. We recruit about 1,800 women a year out of a quota of a little over 38,000. Women make up almost 5 percent of the Corps.

Mrs. BYRON. General Salvadore.

General SALVADORE. The Air Force is presently recruiting about 22 percent of its enlistees who are women, one in five—a little better than one in five—and the last time I looked, we had about 75,000 women on Active Duty.

Mrs. BYRON. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, gentlemen.

The meeting will now be adjourned, and we will reconvene at 3 o'clock with a discussion on advertising which will be followed by a panel of recruiters. Thank you very much.

[Whereupon, at 12:45 p.m., the hearing was recessed, to reconvene at 3 p.m.]

AFTERNOON SESSION

The CHAIRMAN. This afternoon, we continue the hearing on the status of the sustainability and military recruiting in the all-volunteer force. We have an interesting panel here to discuss the issue of advertising in the all-volunteer force.

We have Donald Jugenheimer, Acting Dean and Professor of Communications at the College of Liberal Arts at Farleigh Dickinson University. We also have Albert J. Martin, Advertising Consultant.

Mr. Jugenheimer, you can go first; then you have tapes to show. Mr. Martin will go next.

Gentlemen, the floor is yours.

STATEMENT OF DONALD JUGENHEIMER, ACTING DEAN AND PROFESSOR OF COMMUNICATIONS, COLLEGE OF LIBERAL ARTS, FARLEIGH DICKINSON UNIVERSITY

Mr. JUGENHEIMER. Thank you for the opportunity to discuss how advertising contributes to the military recruiting process and impact.

Advertising has evolved into an essential part of the military recruitment process. It would not be possible to recruit so many service personnel of such high caliber and at so efficient a cost without the use of advertising and related promotional efforts.

However, advertising is not the solution to every recruitment problem. There are limits to what advertising alone can accomplish. Although advertising can generate interest, change opinions, initiate inquiries and generate store traffic, advertising by itself is not as strong in bringing about an actual sale.

Thus, advertising can supplement the military recruitment effort, but it cannot supplant the recruiter. No matter how much advertising and promotion might be employed, it would be very difficult and probably impossible to use mass media communications to replace the effectiveness of face-to-face recruiting contacts.

What then is the proper role of advertising and promotion in the military recruitment effort? First, advertising can supplement the recruiter, making the recruiter's task more productive and effec-

tive. Using advertising to approach prospects and make initial contacts, the recruitment effort can concentrate on convincing prospects of the value of military service, and is more likely to convert prospects into participants.

Second, advertising can help change opinions and attitudes from unfavorable or neutral impressions into positive views. Advertising cannot create basic needs and has only limited ability to manipulate ones. But it is a powerful tool in converting those into acquisition behavior and in channeling wants and needs toward the marketplace.

Third, advertising is more efficient than personal contacts. If it were feasible to make personal contact with all the young military prospects, that would be the most effective way to recruit. But it would require a huge recruiting force many times what now exists.

Using the efficiency of advertising saves money, effort, time and manpower.

Fourth, advertising is pre-transactional. Advertising may not be as effective as personal contact in making an actual sale or commitment, but it is especially effective prior to the point in time of sale, opening the door for prospects and generating leads.

A self-selected prospect who has received a recruitment message and responded by calling an 800 number or returning a post card is far more likely to act favorably to a recruiter's introduction and offer. Advertising counters the perceived risk inherent in any major decision.

Fifth, advertising is post-transactional. Advertising can keep the prospects committed and sold by maintaining contact, reminding of the benefits to be gained, and thus retaining those who have made an initial commitment. This attribute of advertising is especially important in the success of the delayed entry program.

Advertising helps reduce the post-decision anxiety, providing reassurance that the correct decision has been made.

When used properly, advertising provides a favorable return on its investment. A study by the Strategic Planning Institute on the topic of the profit impact of market strategy demonstrates higher levels of advertising produces a return on investment of nearly double that of lower amounts of advertising.

Research determined how advertising levels influenced the perceived value of an offer. To paraphrase an announcement of these results, it not only pays to advertise. It also pays to advertise more.

In an era when productivity is often understood only in terms of cutting costs, this research reaffirms the importance of adding to sales value through advertising.

It is reassuring to note military recruitment advertising is especially sophisticated and focused. Military recruitment in advertising is among the marketing forerunners in knowing its target market and prospects through the tracking study. Military advertising managers examine the marginal return on investment of their advertising and other recruitment communication means.

Military advertising uses some of America's best advertising agencies to generate some of America's best advertising. This advertising effort is overseen by dedicated people committed to its success.

During the period of the strongest, most intensive recruiting, the impact was experienced by measuring production against goals. The Army's "Be All You Can Be" slogan was measured as one of the 10 most recognized advertising slogans in the country, competing against all major goods and services advertisers.

This level of efficiency provides the reasons why military recruitment advertising could be maintained or expanded. Recent military field combat successes are generally attributed to high-technology weapons systems. The military needs intelligent people who can operate these systems.

It is essential to recruit the best young people, those who rank in the upper half of their high school classes. Yet, in this task, the military is competing head-on with colleges and universities, who are offering more incentives and scholarship support to attract these same youngsters.

This is partly attributable to the diminishing supply of high school graduates. In New Jersey, the number of high school graduates declined by 16 percent over the last 2 years. That downward trend will continue for the next few years.

The military will have to work harder to recruit adequate numbers of qualified individuals, even though the size of the forces may be reduced.

Even though the economy has been soft, it will grow stronger. That means more competing opportunities for young people. It also means that steady advertisers can take advantage of this economic situation.

According to a McGraw-Hill research study, advertisers who have maintained or increased their advertising during recessionary economic times gained a more than three-to-one sales advantage over advertisers who fell into a defensive posture.

As measured by the American Business Press research, the short-term impact is higher sales and net income for advertisers who do not reduce their advertising efforts. In the longer term, sales for firms that continued advertising enjoyed increases averaging as much as 14 times greater than those for firms that cut advertising.

Reducing advertising has a long-term detrimental impact. A study by the Center for Research and Development indicates aggressive advertisers may gain as much as 4.5 times on market share compared to overly-cautious competitors.

If the level of military recruitment advertising is reduced, recruitment will become more difficult. The projected dip in quantity is also likely to be accompanied by a dip in the quality of recruits. As research data indicate, it will be more difficult to recover market position in the future.

Right now, following the successes of Operation Desert Storm, there is an opportunity to take advantage of the situation to attract strong and motivated recruits. Advertising can make powerful contributions to this effort, enhancing its record as an efficient and effective factor in the military recruitment programs.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Now, I guess we are going to see the ads on the TV here.

Mr. SCHWEITER. These are pre-Desert Storm service recruiting advertisements from each of the Services.

[Videotape presentation.]

The CHAIRMAN. Those are the pre-Desert Storm? Now we have post-Desert Storm ads.

[Videotape presentation.]

The CHAIRMAN. Thank you very much.

Mr. Martin, the floor is yours, sir.

STATEMENT OF ALBERT J. MARTIN, ADVERTISING CONSULTANT

Mr. MARTIN. Mr. Chairman, members of the committee, it is a pleasure to be here today to discuss military recruiting advertising. I have been asked to discuss the appropriateness of the content of military recruiting advertising, advertising's role in recruiting and the effectiveness of the advertising.

Before I do, I would also like to make a personal comment. I want to have the chance to say hello to General Max Thurman; this morning he made it clear to me he was going to set the standard for the rest of the day, and for the rest of the people who would be testifying. That didn't come as any surprise to me, because I have known Max for a long time. He is a tough act, and a tough act to follow. Beyond being the driving force behind today's volunteer Army, he is probably the finest marketing and advertising executive in the country.

Now, to the advertising.

After viewing the videotape presentation of the Services' television advertising, it is clear to me that the advertising is both realistic and accurate. I hope it is clear to the members of the committee, because these advertisements speak best for themselves.

With some variability with respect to individual commercials, taken altogether, the net impression is that the advertising portrays a realistic and accurate depiction of what service members do in performing the defense mission.

The only issue to me is the question of fairness. That is, are the advantages and disadvantages of military service appropriately communicated in the advertising in a balanced way? To answer this question, we should understand the role of advertising in the military recruiting process.

Because the decision to enlist for military service is such an important and complex one for the prospect, it is obvious that advertising cannot be the prime factor in the communication of enlistment information. That is the role of the recruiter.

The recruiter can respond credibly to a broad range of prospect inquiries and interact with the prospect in the enlistment decision.

Advertising contributes to recruiter productivity. Advertising does not produce enlistments by itself. Recruiters and other face-to-face personal elements of the recruiting process, like career counselors, provide the detailed and fully textured information that enables the enlistment prospect to make his or her enlistment decision.

"Closing the sale" takes a lot of time. It takes the personal involvement of the recruiter and the counselor to match the pros-

pect's interests, abilities, aptitude and preferences with the needs of the Service for trained manpower.

Advertising is a very important recruiter support function, but it plays a limited role in the overall recruiting process. Simply put, you cannot execute an enlistment contract by a response card in a magazine ad or an 800 number in a television commercial. It takes a lot more than that to get the youngster to the contract-signing stage.

Volunteering implies choice. The enlistment prospect has alternatives. The higher the quality of the young people, the more alternatives for personal and career development are available to them.

With the declining youth population, educational institutions and private employers are becoming better and more innovative recruiters. One only need have a 16-year-old junior in high school, as I do, to see how effective colleges and universities have become over the past few years at recruiting students.

They are penetrating this shrinking market of smart, yet unskilled, young people. They have been getting better at competing with Service recruiting.

The implications for military manpower managers are clear. The increasing competition for the fewer quality individuals available will require pay for service members comparable with civilian alternatives, attractive enlistment and retention incentives, and a highly effective recruiting and advertising program.

Defense managers know well that brighter and better educated young people respond best to economic and personal incentives. Competitive pay, personal and career development, quality of service life and funds for college are valued enlistment motivators among high-quality individuals. The satisfaction of serving your country surely counts, as well. All are highly appropriate motivations for enlistment.

The implications of this competition for high-quality youth for military advertising are also clear. Service advertising must be both informative and positively persuasive. It must stress the opportunities and benefits of service.

Military advertising is realistic and accurate. It has tended to stress the opportunities, benefits and unique rewards of service. Competition demands that it do so. It tends not to dwell on the potential costs or disadvantages of service. Some of those are the surrender of personal discretion in terms of quitting a job, working overtime without pay, deciding where to live, family separations, frequent moves, and so on.

Military advertising does not directly and explicitly emphasize the ultimate stress and danger of combat and the likelihood of being put in harm's way. The advertising does not talk about becoming a casualty. However, the dangers associated with combat and the work of an "armed force" are certainly implied in the high level of realism portrayed in most of the advertising we have seen today.

Considering the relatively limited support role of mass impersonal advertising in the overall, mostly personal process of recruiting, the emphasis on the advantages of military service in the advertising is, I believe, correct and appropriate. It is certainly fair to the prospective service member.

To alter the content of the advertising to stress the disadvantages of service would be counterproductive. Who would argue to spend taxpayer dollars to use mass media to advertise the negatives of joining the military?

Anyone who concludes that the military's advertising is unfair should look to the soldiers, sailors, airmen and Marines in today's Active and Reserve component units. Those individuals are the best judges of how fairly advertising and recruiting has influenced them.

It is a long process when you consider the youngster's initial exposure to advertising through recruiter contact, influencer discussions, test taking, career counseling, contract signing, being in the delayed entry pool for some period of time, and recruit training.

It is hard to believe that a high-quality youngster, like those being recruited today, could come through that process and be uninformed about the responsibilities of service and the combat mission of the Armed Forces.

Those who get through today's recruiting screen are very high quality and smart young people. No one should ever underestimate their level of skepticism about advertising. They are surely experienced and wise viewers of advertising. Our culture ensures that.

As to advertising's effectiveness, the performance of our military in Operation Desert Storm is the best evidence of the effectiveness of the recruiting and advertising programs of the Services.

Operations Desert Shield and Desert Storm took the volunteer force into unknown territory. You have heard today they are still trying to sort out the results of some of that. Thankfully, the recruiting results from the first half of fiscal year 1991 continue to be outstanding. The military has shown sensitivity, flexibility and responsiveness with its advertising policy over this period.

I would have assumed that as the probability of war increased, latent patriotism would have become more evident. It did. If so, I would have expected to see the Services and the Office of the Secretary of Defense heighten the patriotic tone of their advertising. They did.

The Army's post-Desert Storm ads are highly realistic. They clearly reflect the demonstrated competence, commitment and dependability of today's Active and Reserve soldiers. The "Freedom Isn't Free" ad speaks for itself.

Military advertising is not only effective, it is seen as exceptionally well-managed as well. The Army's "Be All You Can Be" campaign is recognized, advertising industry-wide, as some of the best advertising of the last decade.

In conclusion, I believe the advertising is realistic, accurate and fair in its role of supporting Service recruiters. The advertising must be informative and positively persuasive if it is to be effective. Military advertising has effectively done its job.

The facts show that the voluntary system works well in meeting the Services' peacetime military manpower requirements. It fosters freedom of choice. Those choices demand the kind of advertising that we have seen today.

We will continue to need advertising like this in peacetime and as long as the American people want their servicemen and women to be voluntary protectors of the Nation's vital interests.

Mr. Chairman and members of the committee, thank you for this opportunity to discuss recruiting advertising.

PREPARED STATEMENT OF ALBERT J. MARTIN

Mr. Chairman and members of the Committee. It is a pleasure to be here today to discuss military recruiting advertising.

I have been asked to discuss the appropriateness of the content of military recruiting advertising, advertising's role in recruiting and the effectiveness of the advertising.

The Service Advertising

After viewing the video tape presentation of the Services' television advertising, it is clear to me that the advertising is both realistic and accurate. And, I hope it is clear to the members of the Committee because these advertisements speak best for themselves. With some variability with respect to individual commercials, taken altogether, the net impression is that the advertising portrays a realistic and accurate depiction of what servicemembers do in performing the defense mission.

The only issue is the question of fairness. That is, are the advantages and disadvantages of military service appropriately communicated in the advertising in a balanced way? To answer this question we should understand the role of advertising in the military recruiting process.

Advertising's Role

The draft was a powerful and highly persuasive force for focusing the attention of the nation's youth on military service. In place of the draft, the Active Force and the Guard and Reserve Components had to turn to the tools of private sector marketing and advertising to stimulate the supply of volunteers.

The success of voluntary manning depends greatly on the ability of the Services to provide accurate information that enables the enlistment prospect to make a sound and informed choice regarding military service. The Services know that the most effective and credible means of conveying information about enlistment opportunities and responsibilities is face-to-face communication between the prospect and his or her recruiter. However, given the relatively small number of military recruiters and the very large number of prospective enlistees in the population, a truly effective communication effort, without heavy reliance on the mass advertising media, becomes a physical and economic impossibility.

That is the same reason that advertising is used to help get prospective purchasers to the auto showroom, to the real estate office or to the stockbrokers office. Advertising gets them in touch with the salesman, who then makes the sale.

Because the decision to enlist for military service is such an important and complex one for the youngster, it is obvious that advertising cannot be the prime factor in the communication of enlistment information. That is the role of the recruiter. The recruiter can respond credibly to a broad range of prospect inquiries and interact with the prospect in the enlistment decision. Therefore, the

role of recruiting advertising is simply to support the recruiter. The advertising aims to:

- create awareness of service opportunities,
- affect attitudes toward enlistment, and
- provide prospect leads to recruiters through national inquiry mechanisms and local recruiting station phone calls and visits.

Advertising contributes to recruiter productivity. Advertising does not produce enlistments. Recruiters and other face-to-face, personal elements of the recruiting process, like career counselors, provide the detailed and fully textured information that enables the enlistment prospect to make his or her enlistment decision. "Closing the sale" takes time. It takes the personal involvement of the recruiter and the counselor to match the prospect's interests, abilities, aptitude and preferences with the needs of the Service for trained manpower.

Advertising is a very important recruiter support function, but it plays a limited role in the overall recruiting process. Simply put, you cannot execute an enlistment contract by a response card in a magazine ad or an 800 number in a television commercial.

Fairness of the Advertising

Volunteering implies choice. The enlistment prospect has alternatives. The higher the quality of the youngsters, the more alternatives for personal and career development are available to them. With the declining youth population,

educational institutions and private employers are becoming better and more innovative recruiters. They are penetrating this shrinking market of smart, yet unskilled, young people. They have been getting better at competing with Service recruiting.

The implications for military manpower managers are clear. The increasing competition for the fewer quality individuals available will require pay for servicemembers comparable with civilian alternatives, attractive enlistment and retention incentives and a highly effective recruiting and advertising program.

Defense managers know that brighter and better educated young people respond best to economic and personal incentives. Competitive pay, personal and career development, quality of service life and funds for college are valued enlistment motivators among high quality individuals. The satisfaction of serving your country surely counts, as well. All are highly appropriate motivations for enlistment.

The implications of this competition for high quality youth for military advertising are also clear. Service advertising must be both informative and highly persuasive. It must stress the opportunities and benefits of service.

Military advertising is realistic and accurate. It has tended to stress the opportunities, benefits, and unique rewards of service. Competition demands that it do so. It tends not to dwell on the potential costs or disadvantages of service. Some of those are the surrender of personal discretion in terms of quitting a job, working overtime without pay, deciding where to live, family separations,

frequent moves and so on. It does not directly and explicitly emphasize the ultimate stress and danger of combat and the likelihood of being put in harm's way. The advertising does not talk about becoming a casualty. However, the dangers associated with combat and the work of an "armed force" are certainly implied in the high level of realism portrayed in the advertising we've seen today.

Considering the relatively limited support role of mass impersonal advertising in the overall, mostly personal process of recruiting, the emphasis on the advantages of military service in the advertising is, I believe, correct and appropriate. It is certainly fair to the prospective servicemember.

To alter the content of the advertising to stress the disadvantages of service would be counterproductive. Who would argue to spend taxpayer dollars to use mass media to advertise the negatives of joining the military? That would:

- unnecessarily constrain recruiting advertising effectiveness,
- limit creative flexibility,
- lessen service competitiveness in the marketplace, and
- drive up the cost of acquiring high quality accessions.

And, I do not believe the whole process would gain in fairness.

Anyone who concludes that the military's advertising is unfair should look to the soldiers, sailors, airmen and marines in today's Active and Reserve Component units. Those individuals are the best judges of how fairly advertising and recruiting has influenced them. It is a long process when you consider the youngster's initial exposure to advertising through recruiter contact, influencer

discussions, test taking, career counseling, contract signing, being in the delayed entry pool, and recruit training. It is hard to believe that a high quality youngster, like those being recruited today could come through that process and be uninformed about the responsibilities of service and the combat mission of the Armed Forces.

Those who get through today's recruiting screen are very high quality and smart young people. No one should ever underestimate their level of skepticism about advertising. They are surely experienced and wise viewers of advertising.

Military Advertising Effectiveness

The performance of our military in Operation Desert Storm is the best evidence of the effectiveness of the recruiting and advertising programs of the Services.

Operations Desert Shield and Desert Storm took the volunteer force into unknown territory. The recruiting results from the first half of Fiscal Year 1991 continue to be outstanding. The military has shown sensitivity, flexibility and responsiveness with its advertising policy over this period.

I would have assumed that as the probability of war increased, latent patriotism would have become more evident. It did. If so, I would have expected to see the Services and the Office of the Secretary of Defense heighten the patriotic tone of their advertising. They did.

The Army's post-Desert Storm ads are highly realistic. They clearly reflect the demonstrated competence, commitment and dependability of today's Active and Reserve soldiers. The "Freedom Isn't Free" ad speaks for itself.

Military advertising is not only effective, it is seen as exceptionally well managed as well. The Army's "Be All You Can Be" campaign is recognized, advertising industry wide, as some of the best advertising of the last decade.

Conclusion

I believe the advertising is realistic, accurate and fair in its role of supporting Service recruiters. The advertising must be informative and positively persuasive if it is to be effective. And military advertising has effectively done its job.

The facts show that the voluntary system works well in meeting the Services' peacetime military manpower requirements. It fosters freedom of choice. Those choices demand the kind of advertising that we've seen today. We will continue to need advertising like this in peacetime and as long as the American people want their servicemen and women to be voluntary protectors of the nation's vital interests.

Mr. Chairman and members of the Committee, thank you for this opportunity to discuss recruiting advertising.

The CHAIRMAN. Thank you both very much.

Let me ask a couple of questions, and then yield to my colleagues here.

Do either of you have any comments to make on the difference between the pre-Desert Storm and post-Desert Storm ads? We only had two or three in post-Desert Storm. Can you make general comments about them, either of you?

Mr. MARTIN. Yes. Prior to the buildup, the advertising of the Services, I think, could be appropriately characterized as advertising that emphasized the opportunities and benefits available to young men and women through the opportunity to serve.

In my statement I said as they got closer to the buildup, and as the buildup occurred, the services and OSD got to exhibit sensitivity and flexibility. In the joint advertising program, they had a line that basically says something like, opportunity is waiting for you.

As we moved through the Desert Shield buildup and closer to Desert Storm, they changed the tonality of that advertising, and it was characterized as stand up and stand out. It was a very dedicated, sacrifice-oriented change.

The Army's advertising, as well as everybody else's, was off the air during the war, off the television. The Navy, for example, I believe in the first couple weeks in January, instituted a paid radio campaign with a very distinctive, highly patriotic tonality to it. It was, in my judgment, very appropriate for the time period.

After Desert Storm, the advertisements that stand out most in my mind are the two Army spots that are running. The "Freedom Isn't Free" and the one that talks about "I am a Soldier. You Can Count on Me."

If you look at the ads from the standpoint of private sector advertising and say that these guys do their job at being sensitive to the changing conditions of the marketplace, you bet they did. In my opinion, they did a highly professional job of managing the advertising.

Mr. JUGENHEIMER. Mr. Chairman, may I add? Desert Storm was almost too brief, a 100-hour war, to take advantage of in terms of recruitment. The heroes of the war tended to be high technology, novel weapon systems and electronics and not one enemy facing another.

I think it would be necessary, if we are to take advantage of this, to show the individual service persons and how they managed this equipment and how they took charge of this situation. I think that because we did not see one person fighting against another, and with the war being over so rapidly, there really wasn't as much of an opportunity to take advantage of this as there might have been had the war gone on for a longer time.

It is ironic because, as was expressed this morning, we would expect a rush of enlistments following this patriotic time. I think we have not seen all of that simply because the war was so successful and it was over in such a short time.

The CHAIRMAN. One more question. It seems to me, looking at these ads as they were running, that some ads seem to be aimed at audiences different from others. I detect that some of these ads are aimed at the person you are trying to recruit and others are aiming, I guess, at what they were calling this morning in-

fluencers, people the young people would go and check with, their parents, their high school guidance counselor, or whoever else they might want to check with.

What is the difference in those ads? What is the characteristic of an ad that would appeal to the influencers as opposed to one that would appeal directly to the person you are trying to recruit?

Mr. JUGENHEIMER. Well, Mr. Chairman, I think that all of the ads have some components that appeal to the individuals.

Those tend to be the portions of the commercials that show an individual in an activity, even though it may be a brief segment of the commercial message.

Certainly, you are correct in your observation that we have different kinds of targets here.

This morning, the topic of public service advertising, non-paid commercials, was addressed.

The problem with them is that they are not going to run at the particular time when you are going to reach the majority of the audience.

If you have a commercial that is targeted to a particular group, if that commercial does not reach that particular group, you lose months of the effectiveness feasible from that particular commercial.

I think that the commercials are especially important for influencing because they are less likely to consult the recruiter upfront. Yet they may be consulted by the prospect early in the process.

So I think it is important that they have at least a knowledge of what the military service is about, as well as a positive image.

Ideally, you would like to be able to target both groups, but you cannot do it because of tight budgets.

It is difficult to get this into a 30-second spot—to show something important to the influencers and something important to the prospects, himself or herself.

The CHAIRMAN. Mrs. Byron.

Mrs. BYRON. Thank you, Mr. Chairman.

Mr. Martin, let me ask, as a consultant, when you look at the ads that we had in 1987, 1988, 1989, the ads that obviously brought in many of the young people who currently are in the service today, was there an underlying theme in those ads?

In the late seventies and early eighties, we saw, I think, our military bottom out in type, profiles, and category 4's. We talked about having to redraft and rewrite our training manuals in comic book-styles to accommodate many of the new people.

In looking back over the ad campaigns, what made the difference which brought about this diametric change?

We talked about General Thurman who made a conscientious decision and was a leader in changing the profile of the young person coming into the service.

From the advertising aspect, what was the dimension that you saw?

Mr. MARTIN. I believe that the way the story was characterized today by General Thurman made it very clear that it was a complex of a number of factors that influenced the turnaround in the Army.

Mrs. BYRON. I understand that.

Your expertise is in advertising, right?

What can you tell me?

Mr. MARTIN. From an advertising point of view, I would say the most significant thing that occurred was that the Army, in particular, had something more substantive and more appealing to talk about to the young people.

The investments that were made in the early eighties and supported by Congress in terms of enhanced educational benefits, the Army college fund, and the like, gave them the opportunity to, in a sense, enhance the product and then promote it with the advertiser.

That is what I would say is the difference between the late seventies and the early eighties.

Now, the Army's advertising, I think most people would agree, took a great leap forward from the seventies into the eighties when the advertising agency produced the "Be All You Can Be" campaign.

There is an old adage in the advertising business which says clients get what they deserve.

It might even be the same adage in the consulting business.

Mrs. BYRON. Or the legislating business.

Mr. MARTIN. That is right.

What that means is if the client has fantastic capability to squeeze the creativity and effectiveness out of a great advertising agency even more than was done in the past, then the advertising is likely to be a lot better.

That is what happened.

The Army got onto the case.

Mrs. BYRON. You mean the Army woke up and realized the ad agency could give them more?

Mr. MARTIN. The Army realized it could be much more than it had been.

Mrs. BYRON. Be all that you can be.

Mr. MARTIN. That is right.

Leadership is the answer. It is shown in the advertising.

Mrs. BYRON. We had a discussion this morning on cutbacks in ad budgets.

In fact, the four branches of the service have really had an impact on their dollars for paid television advertisements.

Consequently, when they are looking at the pay scale for advertisements, they have to buy in the late night movie window which is cheaper.

Those of us in politics know the later you go, the cheaper it is, and you can get more time.

So do you go with more time or a shorter message in a better spot?

My assessment is that many of our young people are the ones who watch the late movies; they are the ones up late at night.

I would not think that this would be a negative for an advertising spot to enlighten and excite the young person.

What would you say from your perspective as a Reserve program consultant?

Mr. MARTIN. From my perspective not only as a consultant, but having worked for many years in the Office of the Secretary of De-

fense, the services run very highly professional management activities.

Their ability to work with their advertising agencies to find the best, most cost-effective times to place the advertisements, given the information in the media in terms of who is attending to those media, is absolutely excellent, certainly on a par with anything in the private sector and some would say maybe even better.

They work very hard to put those advertisements in the place where they get the most bang for the buck.

It is hard to say that you should only have 1 day part versus another day part.

They make those judgments based on sound, solid arithmetic about who is watching at what time of the day.

That is the way it works.

Mrs. BYRON. I know your fellow panelist is convinced that the young student in the late hours at night is cracking books, not watching television, and it would be a better time to catch them during sports time.

Mr. Chairman, I have no further questions.

The CHAIRMAN. Any further questions?

Gentlemen, Thank you very much for a very interesting presentation. It was very fascinating to watch the films.

Thank you very much for coming.

Mr. MARTIN. Thank you very much, Mr. Chairman.

The CHAIRMAN. Let me introduce the members of our panel who are all non-commissioned officers, recruiters from the field.

We have M. Sgt. Richard D. Basch from the United States Marine Corps; Electrician's Mate First Class Michael Snyder, United States Navy, S. Sgt. Manual Ceja, Jr., United States Air Force; S. Sgt. Keith Caston, United States Army; and Sfc. Anthony Hill, United States Army Reserve.

Gentlemen, Thank you very much for coming.

We would like to go down the panel and begin by asking each of you for an opening statement.

I guess we would like to ask you to talk about what changes you have seen as recruiters in the field since Desert Shield, including Desert Storm.

Sergeant Basch, we will start with you and go down the line.

STATEMENT OF M. SGT. RICHARD D. BASCH, UNITED STATES MARINE CORPS

Sergeant BASCH. Mr. Chairman, distinguished members of the committee, I, too, would like to echo the sentiments of appreciation for the cooperation we have had in the past.

In particular, Mr. Montgomery, we do appreciate that GI bill.

It means a lot to us. The continued support of the committee means a lot to us.

It was interesting to hear the comments this morning about support programs, about advertising, about recruiting, about policies, realizing that really they are talking about us because all of that is designed to support us so that we can support the all-volunteer force.

When we think of changes, I think the first thing that comes to all of our minds, in particular mine, is that while quality has gone up, we have paid a price.

The price is not always measured in terms of dollars.

It is often measured in terms of time, sacrifice and in measures of commitment.

I don't wish to sound like it is a sacrifice that we have not been willing to make, but as a recruiter in the field, we sometimes wonder where the equilibrium point will be.

My charter has been to respond openly and candidly and to welcome the members of the committee into the recruiter's world where the rubber meets the road.

Thank you, sir.

The CHAIRMAN. Thank you.

The CHAIRMAN. Sergeant Hill.

STATEMENT OF SFC ANTHONY HILL, UNITED STATES ARMY RESERVE

Sergeant HILL. Mr. Chairman, members of the committee, first of all, thank you for the opportunity to tell you why I recruit for the Army Reserve.

My being called here is just another example of our great form of Government and an experience that I can share with applicants in the future as I encourage them to be all they can be.

My name is Sfc. Anthony Hill. I am a recruiter for the United States Army Reserve.

I volunteered for this job. Since February 1990, I have been actively assigned to the Rochester Recruiting Station at Upstate New York.

I am here to report on my experience since August.

In the last year, I had a lot of success with high school students.

I think it is partly because I have done so many interesting things in the Army, communications, piano player, drill sergeant and now recruiter.

I can talk to students and tell them, though their experiences may not be the same, they will have many opportunities in the Army Reserve.

Also, the 98th Training Division headquarters is nearby so I can take students there and show them what reservists do.

Two units from the Rochester Army were deployed to Desert Shield/Desert Storm.

My job happens to be on one of them. Others, such as medical specialists not on alert, volunteered to go.

There was a lot of local press about these deployments so young people and parents were asking questions.

When I first met parents, they are often thinking, "What is he going to say now?"

What I say is what I have always said, but it hits home closer since Operation Desert Shield.

There are a lot of good reasons to join the Army Reserve: money for college, assistance in training, and being a hometown soldier.

But I always say that they need to understand that it comes from within the framework of the Constitution to wear the uniform.

I remember giving a class at one of our monthly meetings on the purpose and meaning of the oath of induction, "I do solemnly swear to support the United States against all enemies, foreign and domestic."

As a non-commissioned officer and leader, I think it is important that any one joining the Army has a sense of purpose and allegiance to the country.

They need to know what they will support and defend.

When I talk to them without getting into my own personal political views, parents and students respect that.

I find that since Desert Storm began in January, I spend a lot of my time answering questions about things people see or hear in the media or elsewhere.

Some parents were concerned about the draft. Some seniors are worried if they join the Reserves they will be taken out of school and sent to the Gulf.

School counselors remembered Vietnam and cautioned students to ask more questions.

I considered recruiting during this period a welcome challenge and was grateful when students, counselors, and parents gave me the chance to answer questions.

It improved my sales and counseling techniques and further established rapport.

It also helped to dispel certain myths associated with recruiting and the Army in general.

From August to January, some high school students and their parents were taking a wait-and-see attitude. So though I have been successful in the market, I switched my strategy during that time.

I recruited more people with prior service into the Reserve than before.

That is not bad.

They helped me to talk to students who were thinking about joining or who had joined, but were waiting to leave for training.

They talked to guys who had been in the Army and wanted to go back during the crisis so these prior service applicants had credibility.

I have always spent a lot of time with the people I recruit, more than what is required.

I think that is paying off.

My recruits are sticking by their decision to serve their country.

I realized before Desert Storm that 17- and 18-year olds have a lot of influences around them.

I want to be a positive influence and that means I must care about them and show them I care.

The community around Rochester cares about their soldiers. Young people saw the respect soldiers in the desert were getting.

The support Rochester is giving its soldiers helps me. There has been more interest in the Army because of Desert Storm.

Now young people see the troops coming home and that keeps them interested.

Our community has a welcome home committee that tries to greet every returning soldier.

The soldiers I talk to are first glad to be home, but also proud they served their country.

People are responding to that.

These people and their relatives are heroes.

I was tasked to put four people in the Army Reserve, three prior and one non-prior.

I enlisted seven, six of whom were non-prior service.

The "wait and see" attitude is gone and I am sure that is because of the Persian Gulf crisis.

Schools are also a little more receptive now.

I was never completely shut out of a school because of Desert Storm, but some were a little hesitant about my access, but that is improving.

Not all schools allow recruiters to visit, but we have a new Stay in School/Stay Off Drugs program that is changing that.

One school allowed me to visit and show the movie, "Tough Decisions".

I studied for the ministry after the Active Army and want to contribute to my community.

The Army Stay in School/Stay Off Drugs program gives me a way to do that.

The Army recruiting command is giving me resources and support to be a mentor to young people who might be in a little trouble and that is exactly what schools are looking for.

Sure they might ask me questions about Operation Desert Storm, but it is the Stay in School/Stay Off Drugs message that really counts in the schools.

I stand out in the community because I wear the uniform. I am a role model and that means long hours and extra involvement, but that is exactly what I want to do.

Soldiering is an honorable profession.

The principles that make good soldiers—leadership, integrity, self-discipline and courage, are principles that are good for society.

I volunteered to recruit for the Army because it has been good for me and I know it will be good for the young people in my community.

Thank you for the opportunity to tell you why I recruit for the Army Reserves.

The CHAIRMAN. Thank you.

STATEMENT OF S. SGT. MANUAL CEJA, JR., UNITED STATES AIR FORCE

Sergeant CEJA. Good afternoon.

I am Air Force S. Sgt. Manny Ceja, Jr.

I am an Active Duty recruiter in Lowell, Massachusetts.

I would like to briefly address changes I have seen in recruiting over the last few months.

During the first stages of Operation Desert Shield, the public in my area was not as receptive to the military in general, which in turn had a negative impact on my recruiting efforts.

My job as a military recruiter had become more and more difficult.

Many parents as well as students felt that an individual would be pressured simply by speaking to me.

These young people no longer wanted to seek information on the benefits and opportunities that the Air Force could offer them.

Their primary concern at that time was Operation Desert Shield.

Five months later, we entered Operation Desert Storm. The public for the most part, seemed to accept the fact that we were there and would not return until all our objectives were met.

At this time, there seemed to be a change in the community.

I saw people wearing yellow ribbons, patriotic bumper stickers, and even a positive rally at City Hall supporting our troops in the Gulf.

Recruiting at this time was still hard, but not as difficult as in the beginning.

Let me be more specific in regard to the number of people who seek me out for information regarding enlistment, the quality of those people, and the mood of the community.

First, the number of applicants who call in or walk in my office has decreased, by approximately 20 percent compared to last year.

Second, there has been no change in the percentage of people who I can tentatively qualify through pre-screening.

So the quality of those people has not changed.

Typically, many applicants are disqualified one way or another through pre-screening anyway, and that has not changed.

I believe that some people in the community expect the military to recruit anybody off the street. That is not true.

We need quality people for a quality force.

My primary interest as an Air Force recruiter is quality, not quantity.

The mood of the community has shifted a lot.

More and more people seem to understand why we are out there and apparently have decided to support us.

I noticed more parades and TV specials welcoming the troops.

Although the mood in my community has shifted to the positive side, I still find that my school visits have decreased due to a lack of interest on the part of the students.

The counselors I have associated with the last 2 years have noticed that my visits are not as productive as last year.

My feeling is that this is a temporary condition and will get better as the time passes.

Another example is through telephone prospecting—calling potential applicants at their homes.

Although we do have our patriotic group, there are still people out there who don't enjoy hearing from me.

The number of disinterested parents/students has, without a doubt, increased.

The first thing that comes to mind for some people is the prospect of war.

With that in mind, they will just hang up or just won't let you speak to their son or daughter.

As a parent, I can understand their feelings.

As a recruiter, I would like to have the opportunity to educate them about a career in the Air Force. The opportunity, however, isn't always given to me.

Yet, through all this frustration, Air Force recruiters still work hard to seek qualified applicants.

Our recruiting motto "Work smarter, not harder" has definitely come into play.

We are attracting and selling young Americans with the incentives they are most interested in: education, training, work experience, a good quality of life, and the opportunity to serve their country.

I don't intend to see the quality of people in my Air Force go down.

It hasn't happened yet and I don't expect it to in the future.

We have the greatest Air Force in the world and we must remain very selective.

Finally, members of the Committee, I would like to close by simply letting you know that my fellow Air Force recruiters and I intend to recruit top-notch applicants.

We have in the past, we do now, and we will continue to do so in the future.

If it requires more hours in our recruiting efforts, then so be it.

We will continue to do our best and will not settle for less than what our expectations and requirements may be.

Thank you very much for your time and I appreciate the opportunity to speak to you today.

Thank you very much.

The CHAIRMAN. Petty Officer Snyder.

STATEMENT OF ELECTRICIAN'S MATE 1ST CLASS MICHAEL SNYDER

Mr. SNYDER. Thank you very much.

Mr. Chairman and distinguished members of the Committee, it is a real honor to appear before you today as a Navy recruiter.

As a recruiter, my job is to "sell" the Navy to the young people in Rapid City, South Dakota.

Now, I am not a salesman; I am a sailor and an electrician.

I would rather be underway on a ship than pushing papers at a desk in recruiting, but the Navy is my career and my job, and it is important to me to make sure the people who join are going to be good shipmates.

In that respect, what I do is not so much sell, but share my experiences.

Then if the person is right for the Navy, and if the Navy is right for the person, then I have done my job.

Recruiting in South Dakota is a very tough job, even in the best of times.

Myself and one other recruiter are the only Navy within about 350 miles.

Most of the people I talk to have never met a sailor, have never seen a ship, and don't know the first thing about the Navy.

They really have no awareness of the Navy for me to build on, so it's like starting from scratch.

About the only thing they do know is that we go in the water—from that point I have to educate them about the Navy totally, before I can ever try to recruit them.

This is where advertising would help.

If the public in my area had some basic information about the Navy, its mission and opportunities, it would make my job easier.

Recruiting has gotten even tougher lately for numerous reasons.

The first one is budget tightening.

All applicants must go to the Military Entrance Processing Station for physicals and paperwork completion.

This station is a 6½-hour drive from Rapid City.

We used to fly all our applicants there, as the other services still do.

Now, because of budget tightening, we can only fly them periodically.

Normally we either have to drive them, which becomes a 2-day trip, or send them by bus, which takes 10 hours.

Another thing that made recruiting harder was Operation Desert Storm.

Many of the young men and women I talked to were worried that they would go to the Middle East if they joined the Navy.

I told them the truth: there was a possibility that they could go, but it was not definite.

The kids and their parents were more worried about the danger of joining the Navy, due to Operation Desert Storm.

Recruiting in post-Desert Storm has been a little easier.

Appointments are easier to make and kids are more willing to talk to me about the Navy and are not really as concerned about war as they were before but, because of the war, their parents are more afraid than ever.

I believe in telling them straight—the Navy is not an easy job. It is always dangerous.

Sure, I tell them about education and all the benefits, but I also let them know that defending their country is what joining the Navy is all about—and that can be dangerous.

The other thing that makes recruiting more difficult now is the new quality standards.

When I first came to recruiting, someone who hadn't finished high school or someone who got a low score on the ASVAB could still get in the Navy.

Now, they can't.

Smart kids who have finished high school are harder to convince that the Navy is a good choice—many of them are going to college or vocational school or already have jobs lined up.

This makes it harder to recruit, but it also gives us a higher quality soldier.

Since I am going to be working with these people somewhere down the road, I'd rather they be of the highest possible quality. So that challenge is worth it.

Recruiting is not duty I volunteered for.

Before I came here, I spent 5 years on the U.S.S. *Cape Cod*.

I was stuck in Rapid City when she pulled out for her first cruise without me. I felt like I should be on the ship, and I felt like a piece of me was going with her.

After pulling a tour in recruiting, I know that I have done a necessary job—had some impact on the Navy—so when I do go back to a ship, 460 days from now, I will probably be working with some of the young men and women I helped join the Navy.

The fact that they will have gone from civilian to sailor to shipmate is something that will make me proud.

I will have made a difference.

The CHAIRMAN. Thank you very much.

The CHAIRMAN. Next is Sergeant Kaston.

STATEMENT OF S. SGT. KEITH CASTON, UNITED STATES ARMY

Sergeant CASTON. Good morning, Mr. Chairman and members of the committee.

My name is Staff Sergeant Keith Caston, and I am a U.S. Army recruiter.

I am assigned to the Norcross Recruiting Station, in a suburb of Atlanta.

Before joining the recruiting command a little over a year ago, I worked as a field artillery mechanic.

I am here to report on my recruiting experiences since August of 1990.

First, I would like to say, I joined the Army to serve my country and to get skills training, and I believe young people are doing the same today.

I like recruiting and so far I have been pretty good at it.

Each month, we are given a mission—the type and number of people we should sign up.

I find that what works best for me is to let my mission tell me where I need to be recruiting—for example, seniors or graduates—but not to let the number drive me.

My goal is to sign up as many high-quality people as I can each month, and the numbers take care of themselves.

However, the job was tougher during Operation Desert Shield.

Don't get me wrong, there are people out there who want to join the Army, but the time from contract to contract lengthened.

It was taking more time to enlist someone in the Army.

So even if I kept my production to levels before August, I was working more hours to do that.

Applicants also required more follow-up.

I spent more time building confidence and trust with prospects and their parents.

Parents are an important factor whether I am talking to a 17-year-old who needs a parental consent form signed, or a 21-year-old living on his own.

Parents must be included in the enlistment process.

They need to understand all of the rewards, both tangible and intangible, that are available to their children who serve in the Army.

When I talk to prospects, I don't just talk about money for college or skills' training. I talk about the intangible rewards the Army offers young people: an opportunity to serve their country, and opportunities to experience esprit de corps, teamwork, disci-

pline, and leadership—simply, the opportunity to build a level of maturity needed to succeed in the corporate world.

When I talk to a senior and his parents about those things, I see his or her mother and father nodding their heads.

When I tell a high school senior that the things in life that people respect the most are the hardest to get, they understand why someone will join the Army and go combat arms.

They ask me about the ribbons and badges I have on my uniform.

I tell them what it took to get those and that other soldiers look up to that.

I let them know that combat arms may mean hardships, but that discipline will gain them respect, both in the Army and as a veteran.

Those messages were true before August and they are true now, but during a time like the last few months, intangibles like esprit de corps, discipline and teamwork really meant something.

The units deployed to the desert counted on teamwork and a sense of common purpose to see them through—and the things I talk about to my applicants and new recruits were demonstrated before their eyes every time they turned on the news.

I think the trust I build with a prospect and his parents is the most important thing.

Trust doesn't come easy—honesty is what builds trust with parents.

When I talk about the downside as well as the rewards, parents know I am telling the truth.

People joining the Army today are smart; they know they are going to be soldiers and they have a duty to defend their country.

My job is to remind them that people who serve their country gain something in return, and I don't mean only money for college, but when I can send them to a guidance counselor and he starts adding on tangible benefits like money for college, it really helps.

I think money for college, enlistment bonuses and guaranteed training is important.

They sweeten the pot.

I sell the Army experience; the guidance counselor adds on the other.

It is great because everything the guidance counselor offers becomes a bonus.

Young people continued to see the benefits of money for college and skills training all through Desert Shield and Desert Storm.

I know they felt good about serving their country in time of need, but they also were concerned about their personal futures.

With the college benefits, skills training and leadership training the Army is offering, I know they have got a lot going for them today and in the future.

If I may take a moment, I would also like to tell you about another aspect that helped me recruit during Desert Shield and Desert Storm: the support of the people in my community.

I know the show of support was important, not only for those of us already in uniform, but for those thinking about joining during this crisis.

Since Desert Shield began in August, people seemed more aware of me as a soldier.

They have a few more questions than before, but no one has said anything against me or what I do.

I had no trouble going to schools or places I normally go to talk to people.

My mission as a recruiter would have been tougher if I had been barred from the high schools in my recruiting zone.

I appreciate the fact that they understood my job is to make sure young people have the information they need to make a decision.

As a recruiter and a soldier, all I can say to all of the people who supported us is thank you.

The recruiting command's motto is "Provide the strength," and as a recruiter during the crisis that was what I was determined to do.

We worked hard during Desert Shield and Desert Storm; but I look at it this way: our soldiers in Saudi were working long and hard, too.

If I couldn't be there with them, then I wanted to do what I was doing—recruiting.

Just like them, I had a job to do and I have the discipline to do it.

Thank you very much for this opportunity to testify on Army recruiting.

The CHAIRMAN. We thank all of you.

Let me ask the first question, gentlemen; that is, tell me a little bit about what you did, the kinds of things that you did.

Sergeant Caston, you mentioned some of the things.

What did you do when you found in the period of Desert Shield that it was tougher to recruit?

Tell me the kinds of things that you did to compensate for the fact that people were a little bit reluctant at that point to sign up because they didn't know what was going to happen.

Sergeant CASTON. One of the things I did to accomplish my mission at that time was instead of making as many phone calls as I had before, I got out there into the area from which I recruit and did a lot more face-to-face prospecting.

When I scheduled appointments, I made sure the applicants had their parents with them so that everyone was understanding.

A lot of times the parents may think of questions the individual I am trying to recruit does not.

So I think getting everybody involved in the process, helped it out.

The CHAIRMAN. Did any of you do other things to try to compensate?

Sergeant BASCH. Yes, sir, it was an interesting phenomenon because we found, first of all, a great deal of misinformation or misunderstanding that we had to cope with.

A lot of school officials, for example, were afraid if a military recruiter talked to one of their students and that student enlisted he would be taken out of school and sent overseas almost immediately.

We addressed that problem by being very open, sending a letter to the school officials, telling them that our first consideration is the same as theirs, that the students complete their education.

We explained the cycle of the military training and I think that alleviated some fears.

We found that schools were somewhat reticent to let us come through the door not just because of that reason, but because they thought it was a way of endorsing Desert Shield, when at that time America was not sure when they wanted to do so.

I guess the best camp would be the San Francisco Unified School District.

They made it very clear what their posture was, but they were not alone.

Once America committed to Desert Shield, there was still some reservation.

By now, America was almost overwhelmed by what the military could do.

We still had to deal with the parents and the counselors. I think this relates to the question about why, with the great victory in Southwest Asia, haven't we seen a recruiting surge?

Believe it or not when it comes to Desert Storm, for those who were less than supportive of the military, this was proof that the military was a high-risk operation.

Rather than take this as an example of our competence, many viewed it merely as, "Well we really don't know. It was too short to tell, but the risk was very obvious."

We had to spend a lot of time.

We shifted markets.

Obviously, high school seniors were not very productive.

We had to deal with the graduate market. They were more receptive because they were more enlightened.

They had a greater taste of responsibility.

They also were in a position where fewer of them required parental consent.

You want to talk about tough, talk to parents about signing so their son can join with the imminent possibility of going into a war zone.

That is what we had to do, and it proved successful.

There was a cost.

We are now in a period where it is historically slow and because we have not been in the high schools, our message is not out.

This is the time period when most seniors have made decisions. Add to that advertising.

We have to remember that all of this is to inform the public as well create awareness and create differentiation between the services.

We as recruiters—I have been in recruiting for 18 years—can tell you we are constantly informing the public about the basics of what the military is and what it does.

Without advertising, I just wonder how long it would take me to get beyond that and begin to talk about how I can help them.

Sergeant CEJA. I meet with my people in my program at least once a month.

It is a requirement that we have.

I depend a lot on them and they help me out. They bring friends in to speak to me and they join them during the appointments to help them be more at ease.

We have to keep the parents in the loop, which makes us go out and make more house calls.

At the same time, I did a lot more base tours.

It took a lot of time out of my schedule, but it was more productive.

As Sergeant Basch said, the advertising helps us out. It definitely does.

That is what we need to get the word out.

The CHAIRMAN. What would you guys want in the way of help? Would you want more advertising, more recruiters or more support for recruiters?

If you could get one thing, what would you want?

Petty Officer Snyder, what would you want?

Mr. SNYDER. As far as the Navy goes in South Dakota, the public thinks it is a gray ship that goes in the water.

That is all they know.

The CHAIRMAN. So you would like some advertising?

Mr. SNYDER. I have a school that is 3 hours away, a one-way drive.

The CHAIRMAN. Sergeant Hill, what about you?

Sergeant HILL. Mr. Chairman, I would also say advertising, but to educate the general public also as the master sergeant here was saying about the different services and what the purpose of each of the services is.

I found that I deal a lot with high school junior seven's because they are eligible to go into the Reserves under our split option program.

Many times I end up spending additional time with parents and counselors because these youngsters are 17 years old.

Sometimes I meet them around age 16 and their birthdays will be 3 or 4 months down the road.

When I make my school visits, they are tugging at my coattails saying, "Sergeant, don't forget I want to take the test in May or June," or whatever.

I find a lot of counselors and the parents are really misinformed about the armed services, what the qualifications and procedures are.

I have been told, "Well, you called my house 20 times."

In reality, the Army is calling, the Marine Corps is calling, and the Navy is calling.

They think it is me, Sergeant Hill, and they just told me 2 weeks ago that their son was not interested.

The CHAIRMAN. How many hours a week do you guys work?

Sergeant BASCH. A recent survey indicated that 60-plus hours is the average.

The CHAIRMAN. For recruiters?

Sergeant BASCH. Yes, sir.

I think that is realistic and possibly a conservative figure.

Sir, I need to take the opportunity to answer your question, but I am a little reticent that Mrs. Byron would ask what we want to give up.

First, we need an even playing field.

We are definitely in a quality market.

You can tell by the other members of this panel that competition is stiff.

We compete not just against ourselves, but against every general in America, General Foods, General Motors, and I recruit for General Gray.

We don't have the same access to students that universities do.

We don't have the same access to names that universities do.

We have to fight and claw to gain posture exposure and pass out information.

What would we like you to do?

Give us access so we can honestly and candidly give our message.

We think when they find out who we are, they will certainly want to be one of us.

The CHAIRMAN. Sergeant Ceja.

Sergeant CEJA. Our job is also to create awareness throughout our communities and zones.

It is difficult to do that when, in fact, we have a ceiling on how many miles we can drive with Government vehicles and how many phone calls we can make.

Those means are our bread and butter.

If that is taken away from us because of the budget crunch, we are definitely going to hurt in the long run.

So to answer that question, I would mention that as one of the things I would like back.

The CHAIRMAN. Agent Caston, anything to add to the list?

Sergeant CASTON. In addition to that, your continued support for innovative programs like the Montgomery GI bill; programs like that make our job easier.

Your continued support in those fields would help us out.

The CHAIRMAN. I will let Sonny ask the softball questions about the GI bill.

Mr. MONTGOMERY. The benefits that you mentioned, not only the GI bill, but other benefits would be helpful, is that correct?

Sergeant CASTON. That is correct, sir.

The CHAIRMAN. Do you find—and maybe you don't hear about it—but do you find that people join the service thinking that they are signing up for one thing and then when they get there, find that it is different than they expected?

As I say, maybe you don't hear about it, but I wondered to what extent do you think this happens—because people don't have any first-hand knowledge, they come in with a mind set about what life in the military is going to be, Army, Navy, Air Force or whatever, and then when they get there, they say, "Wow, this is not what I thought it would be."

Sergeant BASCH. Probably not to the extent that people would think.

A large part of our enlistments are high school seniors. They are not even sure what life is about at the time they graduate.

In giving information about the service, we are very candid and honest, but sometimes the key influencer is Uncle Bob who was in World War II or Korea, and Uncle Bob has not kept abreast of the changes.

It depends on who they listen to.

If they listen to the recruiter, do intelligent research, and watch the media, then they are not going to be surprised. But if they listen to the poorly informed who are very much their primary influencers, then I think the shock will be more severe.

The CHAIRMAN. Very interesting.

Beverly.

Mrs. BYRON. Let me say the panel has been extremely beneficial.

Sergeant Basch, I am not going to take anything away, but we will try to see if we can give you some added tools.

I have one that is an absolute natural, a freebie, the best advertisement we have going for you all out there.

All of us have probably visited and talked to young people recently and we have seen the euphoria throughout the Nation in the last 6 months.

You said if the public understood what the military was all about it would be easier for you in your job.

Let me assure you what has happened in the last 6 or 8 months on a regular basis in everyone's living room is going to make a great deal of difference.

The public understands the quality, they understand the mission, and they understand that it is difficult for a lot of people who say, "I never knew you were going to send me so far away."

So that is especially true for the Guard and Reserve members.

People said, "Gee, I joined, but I did not think I was going to be called up on Active Duty."

All they have to do is remember that it can happen.

I can remember over the last several years, back in the early and mid-1980s, it was not at all unusual for a young individual to come to me who has been to Marine recruiting and been told, "They said I am too fat. I have to join the fat boy program. What am I going to do about it?"

I am not hearing those complaints anymore.

A young man went to the Army recruiter and signed up with a friend under the buddy program, then he called me and said, "They promised me that we would go to the same base with the same MOS and I am at Fort Meade and my buddy is at Aberdeen. We are not at the same base."

They are in the same region, but not at the same base.

I am not hearing those complaints anymore, so I think your message is getting out louder and clearer that there is an opportunity for people that when it is possible, there will be a buddy system, but it may not always be that way.

We also heard complaints—"My contract said this or that."

I think the military has worked extremely hard with the young people who have gone in the service to give them an opportunity to choose their training fields, but if the specialty they always wished to go into is either full or their skills aren't appropriate, then they are directed toward another field.

From that aspect, I think we have a lot less complaints.

To me, the best recruiting tool that each and every one of you has today is the young man or woman coming back into your community from Operation Desert Shield/Desert Storm in a uniform, who has been hearing from the local high school, the local elemen-

tary school, the local middle school or senior citizen classes who have been writing.

Young people in the school system are so absorbed on what they can do. Many young elementary and middle school students we talked to have said, "I have been writing five or six individuals; do you think I will ever see them? Do you think they will come to my school?"

We have seen an enormous amount of local level publicity recently regarding a young Marine or a young aviator who goes visiting a school system to talk to a seventh or eighth grader today. But remember that a middle school student, a seventh and eighth grader, is going to be the one that you will be wanting to recruit.

They are going to have good thoughts and memories of people they wrote to so far away—they took the time to visit them.

Believe me, the uniform today is one of the best recruiting tools that you have.

We did not see that after Vietnam.

We did not see people with pride in their uniforms. That uniform today is a recruiting tool on which you cannot put a dollar figure.

There are a lot of things out there that I think would be beneficial.

One issue that concerns me is the local economy.

You probably have diverse areas that you represent. How much of an impact does the local economy and the unemployment rate in your community have on the quality of young people you see coming in, not off the street, but ones you actually go out and recruit?

Sergeant BASCH. It varies, ma'am.

You have to remember that when you talk about the economy, the prime players are the parents.

Sometimes it helps influence the parents when savings have been eradicated and they still desire for their child to get ahead. Then we become a desirable option.

We pick up our share because of the economy.

Oftentimes, a young person finds employment that they are content with.

It may be working at a Safeway. It may be doing something along those lines.

It is the first job they have had. It is the first money they have had in their pocket.

For a period of time, they think they have the world by its tail.

It is not until their parents become inconsistent and they are establishing their own identities that it becomes a problem.

In some areas, it has a greater effect.

I don't want the economic indicators to predict what kind of month I am going to have. I can tell you that.

Mrs. BYRON. You can predict what kind of year we will have?

Sergeant BASCH. Our concern is will we last the year. We fight monthly and weekly battles.

At the recruiter level, a year is a long, long time.

Mrs. BYRON. Sergeant Hill.

Sergeant HILL. For me again, it is different. I am a Reserve Recruiter.

I primarily stay in the junior-senior market although I have enlisted some graduates and college students into the Army Reserve.

Last year is the period I covered in my opening statement. I have only been in recruiting 14 months. For that period of time, the individuals I have spoken with are 17 to 19 years old staying at home with their parents.

The only employment that they have is at your local hamburger restaurant or grocery store.

Most of them plan on going to college. Most of them don't want to make a full-time commitment into joining the Army or any other service.

These are the students who say, "Well, I want to go to college full time, but I still want to wear the uniform. I still want to get some part-time training through the Armed Forces."

Mrs. BYRON. Let me ask you a really loaded question: What was your reaction as regular Army, as someone who had been in the service for how many years?

Sergeant HILL. I have been in 16 years; 11 of those Active, ma'am.

Mrs. BYRON. When you heard 14 months ago that you were going to get recruiting duty, what was your reaction?

Sergeant HILL. Well, actually, it did not quite happen like that.

I joined the Army in 1974. I left the regular Army in 1985. I was a drill sergeant at Fort Jackson and decided to use my GI bill to go to school, which I did.

I was in a Reserve unit, 1 weekend a month, and 1 week in the summer as a Reserve drill sergeant at that time.

After 4 years working full time in the post office in Syracuse, New York, talking to retired personnel about the Army, Navy, Marines, I guess I got the military fever again and remembered that when I got out, I was offered a job in recruiting, but I did not accept it.

I had a retired major who told me, "You have done a lot in the Army so I think you would make a good recruiter," so I volunteered to come on recruiting duty in October of 1989.

The CHAIRMAN. Mr. Bateman.

Mr. BATEMAN. Thank you, Mr. Chairman.

I thank all of you on the panel.

You have handled yourselves very well today and each of the services that you represent will be proud of you.

Sergeant Hill, I am interested in your role as a Reserve recruiter.

Are most of the recruiters for the Reserve reservists as opposed to being on Active Duty?

Sergeant HILL. Sir, yes.

We have what we call the Active-Guard-Reserve program. What happens is they TPU reservists, those who train 1 weekend a month and 1 week in summer can volunteer for duty.

Mr. BATEMAN. The recruiters are AGR's?

Sergeant HILL. That is right.

A regular Army recruiter can enlist a reservist, but not vice versa.

Mr. BATEMAN. Can you focus for me on the date of January 12, 1991?

This was the date that the Congress voted on the resolution to authorize the use of force.

My sense is that the American people reflected among themselves a significant division over whether or not that should be done.

That was reflected in the vote here in Congress, but after the vote was taken, the American people were very, very substantially united behind their armed services.

Did you notice in your recruiting any of that attitude or was that attitude reflected in connection with your recruiting activities?

Sergeant BASCH. In terms of the respect that was afforded us, there was a decided change.

They recognized that we had a job to do. They recognized that it was not the American public against the military—it was, in fact, a partnership.

That was very gratifying, especially for those of us who remember the Vietnam experience.

When it comes to what effect it did have on recruiting, on getting contracts, perhaps I can answer that best with a little anecdotal story of a lady who came up to me just bubbling with enthusiasm and wanted to tell me what a high regard she had for her Marines.

Then she qualified that by saying, "Of course, America has always loved her Marines."

Being a recruiter, I thought I would capitalize on this. I said, "Ma'am, do you have a son?"

She said, "Yes, I do."

I said, "What is his age?"

She said, "Twenty-one."

Is he employed?"

She said, "No, he is not."

I said, "Is he healthy?"

She said, "Yes, he is."

I said, "May I talk to him?"

She said, "No, you can't."

It became rather clear to me that there is still an element of "It is a job that has to be done, but maybe someone else's son should do it."

Mr. BATEMAN. Any others have comments?

Sergeant CEJA. I agree. I have had basically the same experiences. We have a patriotic group up there. We need that. When it comes to signing up and say I want to go, there is that tendency of staying back.

Sergeant HILL. What I remember most of all, we support the troops, but not the war, which I just couldn't understand.

Mr. BATEMAN. One other thing I would like to have you comment on. We know how very well we have done in recruiting in terms of the intelligence aspect and the capability of those now being recruited and those who have been recruited over the past several years. What about physical condition?

Are you finding a lot of recruits or potential recruits—people who would become recruits—but who are being turned down because of lack of physical capabilities?

Sergeant BASCH. I guess one of the benefits of being a Marine is those who are not physically fit do not tend to gravitate toward our organization. However, we do find that recruiters are having an increased responsibility in physically preparing prospects for recruit training.

Part of it is a service to ensure that the experience is less traumatic. Part of it is to ensure that they graduate because the contract is important, but actually the final product is more important to us.

So, yes, there is more time being devoted to preparing recruits for recruit training.

Mr. BATEMAN. Throughout the day, those who preceded you, and you have made reference to the term influencers. A new word is entering my vocabulary in the context in which we are using it today. Who are the principal influencers? Parents, teachers?

Who are the leading influencers?

Sergeant BASCH. Of course, it will boil down to a case-by-case basis, sir. It is going to be peers, educators, parents, and other institutions like the church and the synagogue. The reason I say that is you will notice there is a relationship with how much time is spent. I think that is the factor. I never want to use the word "easy" and "recruiting" in the same sentence, because they don't fit, but we find we can be more consistent when we have a lot of exposure at the high school level with educators, counselors and students. That will lead us then to the parents and we can continue the education process.

Mr. BATEMAN. I guess the last question I have is again for Sergeant Hill. In the Reserves, we had the experience of a couple of hundred thousand reservists who were called up, taken away from their families and their livelihood. A lot of them are still in, won't be among the first out because of the nature of their Reserve duties and because they are and have been vital throughout the duration of the deployment.

Is this adversely affecting your ability to recruit today?

Sergeant HILL. Sir, me personally, no. I was given a mission of four for the month of April, and I wrote seven. To be honest with you, there is a lot of talk about it. However, there is community support in Rochester, New York, because we have soldiers trickling back every day or every week.

We have, of course, Kodak Corporation there, and a couple of other large corporations who had employees leave to go to the desert and who have substantially assisted these soldiers since their return.

So the community sees that and sees that the general American public is behind these citizen soldiers. I heard somebody mention this morning, 1 weekend a month, 2 weeks in the summer—that is not something I really sell or harp on in the Reserve because you must make people realize that there may come a time when they will be called to Active Duty.

Saying this to a high school student who remembers nothing about Vietnam goes on deaf ears. But, as Mrs. Byron has mentioned, to actually live through an experience like this, most of the people I talk to will understand what I am talking about.

If they are really interested, I won't have that obstacle to overcome.

The CHAIRMAN. Sonny.

Mr. MONTGOMERY. Thank you very much, Mr. Chairman.

I'd like to follow up on Mr. Bateman's comments, especially to the National Guard and Reserve. Sergeant Hill, I think when you recruit these young men and women from now on, you are going to have to stress further that there is the chance that they may be called to Active Duty.

I mean, that is really the reason for Reserves. Some of them who were in the Reserves were called up and then were shocked that they were called. I think when these people come into the Reserve programs from now on, you are going to have to stress as recruiters that there is a good chance they will be called up. Don't get in if you don't want to take that chance.

Let me thank the witnesses here today. You certainly expressed yourselves well. I know you have been here a long time. You have seen how this process works. What you have said has been helpful to all of us.

I would point out I have been in this business a long time and have gone through the different militaries we have had over the years. Even if your recruiting falls off, I wouldn't concentrate on numbers. I hope the different Services don't push you into that. We need quality.

We found out that quality certainly paid off in the Persian Gulf. I'm impressed with the way you expressed yourselves here today. We used to have people in the military who couldn't really express themselves. That has all changed. We don't want to go back to what it was like several years ago.

So I would push to keep the quality and not worry too much about the numbers in most cases. I want to thank Sergeant Basch, Sergeant Hill and Sergeant Casten for mentioning the educational benefits.

We passed a military package, Mrs. Byron, Mr. Bateman and Mr. Aspin of this committee, an appreciation package to the military, both Active and Reserves. Then we passed a veterans' appreciation package.

It is kind of hard to get the word out. We were in the Persian Gulf only 2 weeks ago and most of the service personnel, Active, National Guard and Reserve, didn't know we had done anything like that.

All they knew was that they were not going to get a \$10,000 bonus from Saudi Arabia, which was strictly a rumor going around. The officers were upset because they were not going to get a \$2,000 income tax exemption each month on their salaries.

But we did pass a good package. It is beneficial. I can talk from the veterans' angle. Also, it helps those on Active Duty. We raised the educational benefits—they have not been raised since 1985—to \$350 a month instead of \$300 for education of Active Duty who signed up for 3 years and put up the \$1,200.

On the National Guard and Reserve, we have raised that from \$140 a month to \$170 a month. So, I think what you need to do as recruiters is to go back and look at some of these packages. A lot of

the benefits don't go to those who went to the Persian Gulf; they go to those who stayed here.

We have covered all the service members from the date the Persian Gulf conflict started until some time, I guess, next year when the President will say that the conflict is over. Most of our benefits do cover all individuals, whether they went to the Persian Gulf or not.

My last comment would be about returning Active Duty personnel who are being forced out. We passed a law last year, and you might be able to help us on this, that these people coming out of the service who may be involuntarily separated—not the ones whose enlistment has run out, they still have another year in the service—but those who are forced out, especially out of the Army because of the reduction in strength levels—can come into the Reserves.

Even though a unit might be filled up, most units can take up to 10 percent above their strength level. What I am trying to get across is some of these fellows come to you looking for a home to come to in the Reserves.

We would like to get that talent in the Reserves and not lose them because of a cutback in strength levels.

I would like to close by asking what benefits do you think you could use, or that we should improve on to use in, say, Active Duty recruiting?

Sergeant BASCH. I don't wish to speak for the Active Duty counterparts, because their needs might be somewhat different than mine as a recruiter. I know that universally recruiters who live away from a base find that the economy away from a base puts greater demands.

For example, the difference in shopping in a commissary and shopping in a supermarket can be 24 percent, which is significant. If the committee would keep an eye out for anything that you could do to help support us in issues that probably fall within the realm of quality of life, it would be appreciated.

That includes everything from obtaining lists, exposure in schools, to additional money to defray costs of housing for those who are on independent duty. Those things over the long run will be not only meaningful to us, but will be meaningful to the all-volunteer force as well, because it better equips us to find quality people and do it over the long run.

The CHAIRMAN. Let me ask one question. Sergeant Basch, you touched on it in an answer to another question. I would like you to elaborate a little bit. Then I would like each one of you to comment.

Basically, this is the question of the pop-in recruits or lack thereof coming out of Desert Storm. Were you surprised we didn't get bigger pop-ins in terms of recruiting coming out of Desert Storm? You had some, and you talked a little bit about some of the reasons.

Could you go into that a little bit more, Sergeant Basch? Then I would like to ask the rest of you, why aren't we getting a bigger pop? It was a very successful war with very few casualties. I personally thought things would be very rosy at the recruiting offices now.

Sergeant BASCH. Remember, sir, that I have 18 years in the business. No, I was not surprised simply because we had a number of other precedents. Grenada was very successful, but that didn't result in a recruiting boom. Just Cause was successful and so is Desert Storm.

The CHAIRMAN. There wasn't anything coming out of Just Cause?

Sergeant BASCH. No, sir.

Mr. BATEMAN. Would the gentleman yield?

I guess there is a great deal to be said, unfortunately, for the old adage, let George do it.

The CHAIRMAN. Must be. Go ahead, sir.

Sergeant BASCH. The one thing that I do think, and we have to remember that the jury is still out on what kind of boom we may have. I think, as you said, sir, it was not that long ago that we were still involved in Desert Storm. It was still a very live issue, not a withdrawal point. We may still find some dividends.

One thing I have sensed is that the patriotism doesn't appear to be a flash in the pan this time. It doesn't appear that America is tiring of their heroes this time. I think that may provide some tremendous results.

Mrs. Byron said, and she had a very valid point, about all levels of our society reaching out in support in one form or another—the letters from the grade school kids, and a large percentage of our country will now be veterans once again with a positive attitude toward their military careers.

We may find a dividend that will build over a lengthy period of time. Short-term gain, possibly not. Long-term gain, undoubtedly.

The CHAIRMAN. Sergeant Hill.

Sergeant HILL. Yes, Mr. Chairman, I would have to agree with Master Sergeant Basch on that. I think it is really too soon to tell. Although I mentioned the success I had last month, a lot of the individuals are young people to whom I had talked prior to Desert Storm who, when Desert Shield was going on said, "Wait a minute."

Now, some of those went on and popped, to use that expression. But I have others who were going to wait a little later in the school year. Like I said, most of the people I talked to are college-oriented.

They will say, "Sergeant Hill, if I don't get this scholarship or that scholarship, I still have you in mind." Generally speaking, though, I think the ground is fertile for recruiters to really get out there and start.

The seeds have already been planted. The short war and the troops returning back to the United States, make me think we are going to have soldiers who are coming back very happy with the reception they are receiving, almost hero status, and they are going to speak well of the Armed Forces.

I would definitely project by fiscal year 1992 there will be an increase because lessons will have been learned and the recruiters will have gotten out there into the market and reaped the benefits.

The CHAIRMAN. Sergeant Ceja.

Sergeant CEJA. I agree with him also, because I believe it is too early to really say anything about how this is going to help us or not help us. I believe toward the end of this fiscal year, not the be-

ginning of next year, we are going to be able to generate more business.

One of the reasons I believe we have not actually had a large demand for people to come into the services at this time is probably because in the past a lot of them believed, "I am going to go into the service, get the education, the training, the GI Bill, what-not, and never get called to war."

All of a sudden, this turns around and happens. Now, you have younger brothers and sisters saying, "Wait a minute. That might happen to me." Right now I think, as the months go by, we are going to be able to even things out and say this is a new era now. We are beginning to start something new again.

This is what we can offer you now. Are you interested? I think it will pick up by then.

Mr. SNYDER. I agree also, sir. In South Dakota, the parents are real scared because of what happened. Any high school senior who is 17, you talk to his or her parents. The ones coming out of school have decided, hey, I am going to go to college or do this or do that.

Later on, in August or September, we should see some benefit from it.

Sergeant CASTEN. I have to agree with the other recruiters in the fact that the future does look bright. There are, to me, variables to look at right now. The ending of the war alone is going to cause a large increase in recruiting. The time of the year, certainly with the summer coming up, is when a lot of people make their decision.

I do expect to see an increase in our recruiting very shortly.

The CHAIRMAN. Let me say on behalf of the committee here how much we appreciate your coming here this afternoon and helping us on this. Very, very interesting. We want to thank all of you.

[Whereupon, at 5:13 p.m., the panel and subcommittee were adjourned.]

OPERATION DESERT SHIELD/DESERT STORM

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, Wednesday, June 12, 1991.

The committee met, pursuant to call, at 2 p.m., in room 2118, Rayburn House Office Building, Hon. Les Aspin (chairman of the committee) presiding.

STATEMENT OF HON. LES ASPIN, A REPRESENTATIVE FROM WISCONSIN, CHAIRMAN, HOUSE ARMED SERVICES COMMITTEE

The CHAIRMAN. The House Armed Services Committee today is honored to have as our witness Gen. Norman Schwarzkopf, the Commander of the Allied Forces in Desert Storm.

When General Schwarzkopf became Commander in Chief of Central Command in November of 1988, no one could have foreseen that the United States would soon deploy more forces in the Persian Gulf than at any time since World War II. General Schwarzkopf faced an enormously difficult job in responding to the invasion of Kuwait.

His force grew over 6 months. Troops and equipment arrived daily.

Servicemen and women already in the desert for months had to stay ready. Allied forces needed to be melted into a fighting force.

Guiding and managing such a complex build-up required the leadership and steadiness that became the hallmark of General Schwarzkopf's command. He inspired confidence in his troops and in the American public. Once the war began, General Schwarzkopf implemented the battle plan fervently.

Today we join the Nation in offering our congratulations to General Schwarzkopf. As we attempt to understand the ramifications of this victory, we would like to discuss several things with General Schwarzkopf.

The first is how organizational reform required by the Goldwater-Nichols Act helped all the services fight the same war. Operation Desert Storm was not marred by the inter-service rivalries or difficulties that hampered other deployments.

The committee would like to discuss how Goldwater-Nichols worked and what, if any, changes should be made.

A second issue is planning the ground war. Operation Desert Storm used smart tactics. The allies fought a war that capitalized on our strength.

How was this plan developed? What other operations were discussed?

A third possible issue is security in the Middle East, post-war security. The war was brought to a successful conclusion, but instability continues to plague the region.

There appears to have been little progress thus far toward creating a more effective security arrangement. What role can and should the United States play in shaping a more secure Middle East?

Should we leave the forces there? How should our policy change?

General, we would like to discuss those and other issues when we come to the questions.

Before I recognize the witness for his opening statement, let me call on Bill Dickinson.

STATEMENT OF HON. WILLIAM L. DICKINSON, A REPRESENTATIVE FROM ALABAMA, RANKING MINORITY MEMBER, HOUSE ARMED SERVICES COMMITTEE

Mr. DICKINSON. Thank you, Mr. Chairman.

I want to join you in welcoming General Schwarzkopf to this committee today.

General, thank you for being here.

The United States military helped to give the allied coalition a decisive victory. On top of that, between President Bush and Dick Cheney, Colin Powell, and yourself, and all the young men and women in uniform, it also helped restore our sense of the national pride and reestablished America as a preeminent superpower, which I think is all important.

This is an important result of the war, and I would like to congratulate you for your role in it.

During Saturday's victory parade along the mall, each service added campaign streamers to its flag in recognition of its achievement in the Persian Gulf.

I hope Desert Shield/Desert Storm also helps the country to recognize the value of a strong and ready military. Desert Shield/Desert Storm demonstrated the slogan, "Be All You Can Be," If you attract and keep quality people and give them the finest equipment and training, then this Nation, when necessary, will fight and win.

The Roman historian Polybius, warned that those who know how to win are much more numerous than those who know how to make proper use of their victories. I think this is very true.

Making proper use of the victory means first achieving a detailed and factual understanding of what worked, what did not work and why.

The committee has already begun to seek out the so-called lessons learned from Desert Shield/Desert Storm. The coalition has won a victory, and like you, we do not want to lose its lessons.

General, as the leader of a victorious coalition of forces in the Gulf, your testimony is obviously crucial to our inquiry. President Harry Truman once said, "The only thing new in the world is the history we don't know."

We look forward to your testimony as we wrestle to learn the history of war that we do not yet know but which we have a re-

sponsibility to understand if we are to maintain a capable and ready military.

Never before, General, and I think never again in history will we have the opportunity to have a long, steady, effective build-up to a point of readiness of materials, sophisticated weapons and people that we have just experienced. Never again will we have the option to dictate the time and place when the ball game, so-called, will begin.

Before we were always engaged in "come as you are wars," and we anticipate the next conflict will be that way also. This time we had the luxury of being able to be on notice, prepare, and to make our own decisions as to how it went.

I think this was a luxury we won't see again. I think it is important that we be aware of the necessity of being ready for a surprise, to keep our so-called powder dry, and to not see things slip through our hands as we have after every conflict in the past.

We seem to have learned nothing from lessons learned before. Hopefully, we can make a difference here. That is the reason we have asked you here. That is why your testimony is so important.

We do appreciate you being here and look forward to your testimony.

Thank you.

The CHAIRMAN. General Schwarzkopf, the floor is yours for whatever comments you might wish to make. Then we would like to ask you some questions.

STATEMENT OF GEN. H. NORMAN SCHWARZKOPF, COMMANDER IN CHIEF, UNITED STATES CENTRAL COMMAND

General SCHWARZKOPF. I am honored to appear before you once again as Commander in Chief of the United States Central Command.

Desert Storm is over. Iraq has been kicked out of Kuwait and the Kuwaitis are rebuilding their nation. This great military victory was possible for many reasons. However, three of those reasons were paramount: First, the men and women of the United States Armed Forces. They are, quite simply, the heart and soul of the finest fighting force in the world today.

It is critically important to remember that this magnificent fighting force, both Active and Reserve, is an all-volunteer force.

A true cross-section of Americans who volunteered to go in harm's way in order to serve their Nation and the interests of the international community.

Of special inspiration to me were our NCOs and young officers who led by their example throughout the grueling days and nights of Desert Shield and by their courage throughout Desert Storm. The all-volunteer force has faced its trial by fire, Iraqi fire, and has emerged a resounding success.

Our fighting forces were armed with the best fighting equipment in the world today. The Apache helicopter, F-117, Stealth fighter, the Tomahawk, Land Attack Cruise Missiles, M1A1 tank, the Patriot missile are all examples of weapons systems which were tremendously successful.

Desert Storm confirmed the superiority of American technology and assured the American taxpayer that their money has been well spent.

Third, the unwavering support of the American people. From the first hour of Desert Shield until the last minute of Desert Storm, this outpouring had a substantial impact on the morale of our troops and on their will to fight.

I can assure you that even in the isolation of our northernmost positions in the desert, our troops had their finger precisely on the pulse of popular support at home. With the knowledge that the strength of the American people was behind them, they knew they could not fail.

Additionally, Desert Storm confirmed that state-of-the-art equipment is required to counter threats in many regions of the world. Our superiority and precision munitions, Stealth mobility, Command Control communications and computers proved to be decisive force multipliers.

Therefore, as we make the hard decisions over the next few years to reduce the quantity of the armed forces, those choices must be based on the fundamental truths about military capability that Desert Shield and Desert Storm reaffirmed.

We should never forget it is the quality of our armed forces that wins wars and deters potential aggressors.

After having highlighted our many successes, it is only prudent that we also acknowledge some areas of concern. Although a detailed analysis of the Desert Shield and Desert Storm will continue for some time, some clear examples have emerged.

Strategic lift, mine countermeasures, both land and naval, friendly force identification, tactical air reconnaissance and the total force policy's roundout brigade concept in a rapidly evolving contingency, just to name a few. I will be happy to expand on this discussion during our question and answer session.

I would now like to provide some thoughts about the post-Desert Shield environment in the Middle East. The vital national interests which we were called upon to protect in the war against Iraq are enduring ones.

Principal among those are peace and stability in the Gulf region, an area that in recent years has twice directly involved the United States in shooting wars. The maintenance of peace and stability will provide the foundation for continued access to Middle East strategic oil reserves, oil reserves which will fuel world economies for the foreseeable future—the freedom of navigation required not only to move oil out of regional ports, but also to keep open strategic lines of communication necessary for effective United States military operations in the region.

I still feel that the threat to the United States in this region will continue to be a regional conflict which, if not contained, could overflow its boundaries and again threaten vital U.S. national interests and draw us into a conflict against an enemy armed with advanced conventional or unconventional weapons.

What have we gained as a result of Desert Storm?

We have thrown back aggression; we have restored conditions in which interests of regional stability can be pursued and advanced;

we have both solidified existing and we have established more favorable relations with key nations in the area.

The realization that the United States is a good friend and a staunch ally will go a long way toward ensuring our access to critical facilities in the region, facilities without which the defeat of Iraq would have been a far greater challenge.

Looking ahead, it is plain to see that the key to our continued access is the maintenance of a strong U.S. presence in the region. This presence could be a combination of forward deployed forces, pre-positioning, security assistance and combined exercises.

The weight accorded to each element may be open to discussion, but the necessity of each element should not be questioned.

In closing, I would like again to thank the United States Congress for its support of Central Command in the years preceding Desert Storm, and more recently for its support during the 8 months that culminated in the liberation of Kuwait.

As you know, I am approaching the end of my service to the Nation. I want you to know I consider it a great privilege to have appeared before this committee as one of my last official acts as the Commander of the United States Central Command.

Again, I thank you for your support and I am ready for questions, sir.

PREPARED STATEMENT OF GEN. H. NORMAN SCHWARZKOPF

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE, I AM HONORED TO APPEAR BEFORE YOU ONCE AGAIN AS COMMANDER IN CHIEF OF THE UNITED STATES CENTRAL COMMAND.

DESERT STORM IS OVER. THE IRAQIS HAVE BEEN KNOCKED OUT OF KUWAIT AND THE KUWAITIS ARE RAPIDLY REBUILDING THEIR NATION. THIS GREAT MILITARY VICTORY WAS POSSIBLE FOR MANY REASONS.

- FIRST, THE MEN AND WOMEN OF THE UNITED STATES ARMED FORCES. THEY ARE, QUITE SIMPLY, THE HEART AND SOUL OF THE FINEST FIGHTING FORCE IN THE WORLD TODAY. IT IS CRITICALLY IMPORTANT TO REMEMBER THAT THIS MAGNIFICENT FIGHTING FORCE, BOTH ACTIVE AND RESERVE, IS AN ALL-VOLUNTEER FORCE. A TRUE CROSS-SECTION OF AMERICANS WHO VOLUNTEERED TO GO IN HARM'S WAY IN ORDER TO SERVE THEIR NATION AND THE INTERESTS OF THE INTERNATIONAL COMMUNITY. OF SPECIAL INSPIRATION TO ME WERE OUR NCOS AND YOUNG OFFICERS WHO LED BY THEIR EXAMPLE THROUGHOUT THE GRUELING DAYS AND NIGHTS OF DESERT SHIELD AND BY THEIR COURAGE THROUGHOUT DESERT STORM. THE ALL-VOLUNTEER FORCE HAS FACED ITS TRIAL BY FIRE, IRAQI FIRE, AND HAS EMERGED A RESOUNDING SUCCESS.

- SECONDLY, THE RIGOROUS TRAINING OUR FORCES RECEIVED. IT TURNED YOUNG, INEXPERIENCED VOLUNTEERS INTO HIGHLY MOTIVATED AND SUPREMELY CONFIDENT SOLDIERS, SAILORS, AIRMEN, MARINES AND COASTGUARDSMEN. MOST IMPORTANTLY, THE TRAINING WAS REALISTIC. WE REPLICATED EXPECTED BATTLE SITUATIONS AS CLOSELY AS POSSIBLE. THE POINT OF ALL THIS HARD WORK WAS TO ENSURE THAT WHEN OUR REAL BATTLES WERE FOUGHT, THEY WOULD BE WON WITH MINIMUM CASUALTIES. OUR TRAINING PAID OFF AND OUR CASUALTIES WERE, THANKFULLY, FAR BELOW EVEN OUR MOST OPTIMISTIC PREDICTIONS.

- AND THIRDLY, THE UNWAVERING SUPPORT OF THE AMERICAN PEOPLE. FROM THE FIRST HOUR OF DESERT SHIELD UNTIL THE LAST MINUTE OF

DESERT STORM THIS OUTPOURING HAD A SUBSTANTIAL IMPACT ON THE MORALE OF OUR TROOPS AND ON THEIR WILL TO FIGHT. I CAN ASSURE YOU THAT EVEN IN THE ISOLATION OF OUR NORTHERNMOST POSITIONS IN THE DESERT, OUR TROOPS HAD THEIR FINGER PRECISELY ON THE PULSE OF POPULAR SUPPORT AT HOME. WITH THIS KNOWLEDGE, THAT THE STRENGTH OF THE AMERICAN PEOPLE WAS BEHIND THEM, THEY KNEW THEY COULD NOT FAIL.

- NEXT, THE SUCCESS OF OUR LOGISTICS EFFORT. UTILIZING A COMBINATION OF STRATEGIC SEALIFT AND AIRLIFT, WE MOVED OVER 541,00 PERSONNEL, THEIR EQUIPMENT, AND SUPPLIES NECESSARY FOR SUSTAINED COMBAT OPERATIONS HALFWAY AROUND THE WORLD IN A SHORTER PERIOD OF TIME THAN ANYONE WOULD HAVE BELIEVED POSSIBLE. IN-COUNTRY, A TRANSPORTATION INFRASTRUCTURE WAS ESTABLISHED WHICH ALLOWED US TO QUICKLY MOVE HUGE AMOUNTS OF SUPPLIES OVER LONG DISTANCES MAKING POSSIBLE THE NOW FAMOUS "LEFT HOOK". THE TASK FACED BY THE LOGISTICIANS CAN ONLY BE DESCRIBED AS DAUNTING AND THEIR SUCCESS CAN ONLY BE DESCRIBED AS SPECTACULAR!

- AND FINALLY, OUR FIGHTING FORCES WERE ARMED WITH THE FINEST MILITARY EQUIPMENT IN THE WORLD TODAY.

-- THE APACHE HELICOPTER FIRED THE FIRST SHOTS OF THE BATTLE TO LIBERATE KUWAIT, PERFORMED BRILLIANTLY THROUGHOUT THE CAMPAIGN, AND AT THE CONCLUSION OF THE WAR, ACHIEVED AN OPERATIONAL READINESS RATE OF 92%.

-- THE F-117 STEALTH FIGHTER, WHILE ONLY 2.5% OF OUR AIR ASSETS, FLEW OVER 30% OF THE TARGETS ON DAY 1 OF THE WAR. IT PROVED TO BE VIRTUALLY INVISIBLE; FLYING MORE THAN 1300 SORTIES OVER IRAQ AND KUWAIT; DELIVERING ORDNANCE WITH PIN-POINT ACCURACY; AND SUFFERING NOT A SINGLE AIRCRAFT LOST.

-- THE TOMAHAWK LAND-ATTACK CRUISE MISSILE WAS FIRED IN ANGER FOR THE FIRST TIME. AND WHAT A SUCCESS! THE TOMAHAWK ROUTINELY DESTROYED TARGETS IN AREAS OF THE MOST CONCENTRATED IRAQI AIR DEFENSES WITHOUT HAVING TO ENDANGER AMERICAN PILOTS.

-- TO QUOTE ONE OF OUR YOUNG TANKERS, "THE M-1A1 TANK AGAINST THE T-72--NO CONTEST!" THE 120MM GUN ON THE M-1A1 WOULD NOT ONLY SHEAR THE TURRET OFF THE VAUNTED T-72, IT WOULD BLOW THE TURRET 20-30 YDS BEYOND THE TANK'S POSITION! AND, IN SPITE OF

THE DIRE PREDICTIONS OF ITS RELIABILITY, ON THE LAST DAY OF THE WAR, FLEET READINESS WAS IN EXCESS OF 92%.

-- THE PATRIOT MISSILE WAS ANOTHER CLEAR SUCCESS STORY. IT DEFENDED MILITARY INSTALLATIONS AND LIMITED THE PHYSICAL AND PSYCHOLOGICAL DAMAGE TO THE CIVILIAN POPULATIONS OF BOTH THE GULF STATES AND ISRAEL.

-- THE PARADE OF SUCCESS STORIES GOES ON AND ON. WE LOST NOT A SINGLE AIRCRAFT IN AIR-TO-AIR COMBAT. WE TOOK DOWN ENTIRE BRIDGE SPANS IN A SINGLE STROKE. WE DESTROYED OVER 3300 IRAQI TANKS AND LOST ONLY 4 OF OUR OWN. THE SUCCESSES OF DESERT STORM CONFIRMED THE SUPERIORITY OF AMERICAN TECHNOLOGY AND ASSURED THE AMERICAN TAXPAYER THAT THEIR MONEY HAS BEEN WELL SPENT.

ADDITIONALLY, DESERT STORM CONFIRMED THAT STATE-OF-THE-ART EQUIPMENT IS REQUIRED TO COUNTER THREATS IN MANY REGIONS OF THE WORLD. OUR SUPERIORITY IN PRECISION MUNITIONS, STEALTH, MOBILITY, AND COMMAND, CONTROL, COMMUNICATIONS AND COMPUTERS PROVED TO BE DECISIVE FORCE MULTIPLIERS.

I WOULD, ONCE AGAIN, LIKE TO TAKE THIS OPPORTUNITY TO EMPHASIZE THAT, AS WE MAKE HARD DECISIONS OVER THE NEXT FEW YEARS TO REDUCE THE QUANTITY OF THE ARMED FORCES, THOSE CHOICES MUST BE BASED ON THE FUNDAMENTAL TRUTHS ABOUT MILITARY CAPABILITY THAT DESERT SHIELD AND DESERT STORM REAFFIRMED. WE SHOULD NEVER FORGET, IT IS THE QUALITY OF OUR ARMED FORCES THAT WINS WARS AND DETERS POTENTIAL AGGRESSORS! THESE QUALITATIVE ADVANTAGES WERE THE INDISPENSABLE INGREDIENTS OF VICTORY; AND JUST AS IMPORTANTLY, THEY ARE KEY COMPONENTS OF A MILITARY POSTURE THAT PREVENTS WAR.

I AM PLEASED TO REPORT THAT, HAVING ACCOMPLISHED OUR OBJECTIVES, OUR REDEPLOYMENT IS VIRTUALLY COMPLETE. BY 1 SEPTEMBER WE WILL ATTAIN A STEADY STATE FORCE LEVEL, FOR THE NEAR TERM, OF APPROXIMATELY 30,000 SERVICE MEMBERS. APPROXIMATELY 16,000 OF THESE PERSONNEL WILL CONSTITUTE A PRESENCE IN THE FORM OF THE JOINT TASK FORCE MIDDLE EAST, CONSISTING OF A COMMAND SHIP AND FIVE COMBATANTS, AND AUGMENTED BY A CARRIER BATTLE GROUP AND

A MARINE EXPEDITIONARY UNIT. SUCH A FORCE REINFORCES OUR COMMITMENT TO AND THE CONFIDENCE OF OUR FRIENDS IN THE REGION. THE REMAINING APPROXIMATELY 14,000 ARMY PERSONNEL WILL INSURE AN ORDERLY REDEPLOYMENT OF UNITED STATES EQUIPMENT--AND THEN COME HOME.

AFTER HAVING HIGHLIGHTED OUR MANY SUCCESSES, IT IS ONLY PRUDENT THAT WE ALSO ACKNOWLEDGE SOME AREAS OF CONCERN. ALTHOUGH A DETAILED ANALYSIS OF DESERT SHIELD AND DESERT STORM WILL CONTINUE FOR SOME TIME, SOME CLEAR EXAMPLES HAVE EMERGED: STRATEGIC LIFT, MINE COUNTERMEASURES, FRIENDLY FORCES IDENTIFICATION, TACTICAL AIR RECONNAISSANCE AND THE TOTAL FORCE POLICY'S ROUNDOUT BRIGADE CONCEPT IN A RAPIDLY EVOLVING CONTINGENCY, JUST TO NAME A FEW. I'LL BE HAPPY TO EXPAND ON THIS DISCUSSION DURING OUR QUESTION AND ANSWER SESSION.

I WOULD NOW LIKE TO OUTLINE SOME THOUGHTS ABOUT THE POST-DESERT STORM ENVIRONMENT IN THE MIDDLE EAST.

- THE VITAL NATIONAL INTERESTS WHICH WE WERE CALLED UPON TO PROTECT IN THE WAR AGAINST IRAQ ARE ENDURING ONES. PRINCIPAL AMONG THESE ARE PEACE AND STABILITY IN THE GULF REGION--AN AREA THAT IN RECENT YEARS, HAS TWICE DIRECTLY INVOLVED THE UNITED STATES IN SHOOTING WARS. THE MAINTENANCE OF PEACE AND STABILITY WILL PROVIDE THE FOUNDATION FOR CONTINUED ACCESS TO THE MIDEAST STRATEGIC OIL RESERVES--OIL RESERVES WHICH WILL FUEL WORLD ECONOMIES FOR THE FORESEEABLE FUTURE--AND THE FREEDOM OF NAVIGATION REQUIRED NOT ONLY TO MOVE OIL OUT OF REGIONAL PORTS, BUT ALSO TO KEEP OPEN STRATEGIC LINES OF COMMUNICATION NECESSARY FOR EFFECTIVE UNITED STATES MILITARY OPERATIONS IN THE REGION.

- I FEEL THAT THE THREAT TO THE UNITED STATES IN THIS REGION WILL CONTINUE TO BE A REGIONAL CONFLICT WHICH, IF NOT CONTAINED, COULD AGAIN THREATEN THESE VITAL U.S. NATIONAL INTERESTS. IF, AT SOME POINT IN THE FUTURE, MILITARY ACTION IS REQUIRED, WE COULD AGAIN FACE SUBSTANTIAL ENEMY FORCES ARMED WITH INCREASINGLY LETHAL CONVENTIONAL AND UNCONVENTIONAL WEAPONRY.

- WHAT HAVE WE GAINED AS A RESULT OF DESERT STORM?
- WE HAVE THROWN BACK AGGRESSION AND RESTORED CONDITIONS IN WHICH THE INTERESTS OF REGIONAL STABILITY CAN BE PURSUED AND ADVANCED.
- WE HAVE BOTH SOLIDIFIED EXISTING AND ESTABLISHED MORE FAVORABLE RELATIONSHIPS WITH KEY REGIONAL STATES. THE REALIZATION THAT THE UNITED STATES IS A GOOD FRIEND AND STAUNCH ALLY WILL GO A LONG WAY TOWARDS INSURING OUR ACCESS TO CRITICAL FACILITIES IN THE REGION. THE INTRODUCTION AND SUSTAINMENT OF OUR DESERT STORM FORCES WOULD HAVE BEEN IMMEASURABLY MORE DIFFICULT WITHOUT THE REGIONAL BASES, PORTS AND INFRASTRUCTURE WHICH WERE MADE AVAILABLE TO US. QUITE FRANKLY, WITHOUT THAT ACCESS, THE DEFEAT OF IRAQ WOULD HAVE BEEN A FAR GREATER CHALLENGE.

- LOOKING AHEAD, IT IS PLAIN TO SEE THAT THE KEY TO OUR CONTINUED ACCESS IS THE MAINTENANCE OF A STRONG U.S. PRESENCE IN THE REGION. THIS PRESENCE SHOULD BE A COMBINATION OF FORWARD DEPLOYED FORCES, PREPOSITIONING, SECURITY ASSISTANCE, AND COMBINED EXERCISES. THE WEIGHT ACCORDED EACH ELEMENT MAY BE OPEN TO DISCUSSION, BUT THE NECESSITY OF EACH ELEMENT SHOULD NOT BE QUESTIONED.

IN CLOSING, I WOULD LIKE TO THANK YOU, THE UNITED STATES CONGRESS.

- FOR YOUR SUPPORT IN THE YEARS PRECEDING DESERT STORM. DURING THOSE YEARS, YOU PROVIDED THE BASIS FOR THE ARMED FORCES WHICH WON SUCH A DECISIVE VICTORY: THE VOLUNTEER FORCE; THE SUPERIOR WEAPONS AND EQUIPMENT OF WAR; AND THE GOLDWATER-NICHOLS ACT WHICH SO EFFECTIVELY BROUGHT THE FORCES FROM ALL OUR SERVICES UNDER ONE CLEAR CHAIN OF COMMAND.

- FOR YOUR SUPPORT DURING THE EIGHT MONTHS THAT CULMINATED IN THE LIBERATION OF KUWAIT. MANY OF YOU MADE THE ARDUOUS TRIP TO VISIT OUR TROOPS IN THE DESERTS OF SAUDI ARABIA, KUWAIT AND IRAQ.

- IN THE FUTURE, AS WE ADAPT TO A CHANGED AND CHANGING WORLD, THE DECISIONS NECESSARY TO ENSURE THE DEFENSE OF THIS VITAL REGION WILL BE TRULY DIFFICULT. AS YOU CONSIDER THEM, I WANT YOU TO KNOW THAT THE MEN AND WOMEN OF U. S. CENTRAL COMMAND ARE MOST GRATEFUL FOR THE ROLE THAT YOU HAVE PLAYED IN THE PAST AND ARE CONFIDENT OF YOUR CONTINUED SUPPORT IN THE FUTURE.

AS YOU KNOW, I AM APPROACHING THE END OF MY SERVICE TO THIS NATION. I CONSIDER IT A PRIVILEGE TO HAVE APPEARED BEFORE YOUR COMMITTEE AS ONE OF MY LAST OFFICIAL ACTS AS THE COMMANDER OF UNITED STATES CENTRAL COMMAND.

AGAIN, THANK YOU FOR YOUR SUPPORT.

The CHAIRMAN. Thank you.

Let me open the questioning and then I will let others ask questions.

Basically, to pick up on the point that you raised about the post-war security arrangement, could you be a little bit more specific and talk a little bit more about what would be the elements as you see it of a security arrangement post-war, particularly as it applies to the military?

Do you see a U.S. presence?

Let me ask my questions and you can answer all of them at the same time: First of all, the question of a U.S. presence.

Second, the issue of a pre-positioning, in what countries and what kind of conditions do you see for pre-positioning equipment?

Third, a Central Command headquarters. Do you see a Central Command headquarters in the Gulf? If so, in what country?

Finally, the issue of arms sales. We have a lot of interest in this right now and the notion we ought to have a freeze on arms sales. Others are arguing that arms sales are part of our security arrangement.

We would be interested in your views on all of that.

General SCHWARZKOPF. How much time do you have, Mr. Chairman; that is a pretty full bill there?

Let me go down each one of them quickly. I see no need for permanent ground presence in the Middle Eastern area. Notice I emphasize "ground presence."

We have now and plan to continue with an enhanced naval presence. That is not much different than what we did after the fall of the Shah of Iran and, frankly, what we did right up to and including the Iran-Iraq War. That is a Middle East force, with some combatant ships in the Gulf, a Carrier Battle Group, forming a presence over there augmented with a Marine Expeditionary Unit of some sort. That is the size of the forward deployed presence we see in the area for quite some time.

On the other hand, I don't think that means we shouldn't have forces in that area. I think it would be a great idea to continue with the joint exercise programs with nations like Egypt and the Bright Star series that Central Command was running before the war. We should try to expand that exercise more with those forces that we exercised with during the coalition.

If we have to come together again, I think we will work better together at the outset. We won't have to go through a long growing process to learn to get together.

I do not think that a permanent presence on the ground is necessary, as long as you can have exercises on the ground, and in the air. Air-to-air exercises, which we do quite effectively now and have done for quite some time, are one of the reasons why the Air Force worked so effectively from the outset with the coalition. Of course, a Navy presence also.

Pre-positioning is something I am very much in favor of. Pre-positioning is a very, very inexpensive way to be able to get your forces into the theater very quickly without having to have a permanent presence over there or without having to devote a great deal of money to air and sea lift.

As you know, the buildup we had over there was absolutely stupendous. It would have been even tougher and bigger had we not had some pre-positioning in the area.

The more pre-positioning we can get over there, I am not talking about vast amounts of equipment, I am talking more about pre-positioned ammunition, pre-positioned food, pre-positioned water or water purification assets, and pre-positioned airbase equipment so you can open up airfields quickly—all of which is non-lethal, non-threatening, absolutely invisible and strictly defensive in nature.

It then allows you, when the time comes, to concentrate your lift on getting troops over there and necessary equipment very quickly without having to bring the whole logistical tail with you.

I think we should seek pre-position agreements with as many countries as we can get them with over there. It is a very, very cheap alternative. We have the equipment now. We have it on hand.

As a matter of fact, a lot of it is there. It would be better to leave it there than to have to bring it all the way back home and then send it back over there if it was necessary.

As for Central Command Headquarters, there is no intention of putting the entire Central Command Headquarters in the Middle East. I don't think that is necessary.

We are in the age of modern communications. I can go down to my war room and talk to every ship in the Gulf any time I want to.

I have no business talking to every ship in the Gulf, but if I had to, I could.

I think what is necessary, though, is some kind of a small forward headquarters element. One of the main reasons is because there is an 8-hour time difference between there and here. Just the ability to do business on a real-time basis and to get immediate answers would greatly facilitate our ability to perform our mission.

Also, a Central Command forward headquarters over there is a demonstration of U.S. resolve. It is a demonstration of U.S. commitment, just as forward-deployed forces have been anywhere else since the end of World War II. I think that is a good signal to send and will certainly facilitate our doing our business.

It is not an absolute necessity, but it is something I would like to see. It has been an objective of Central Command ever since Central Command was established.

We are in the process of negotiating that. There are several countries it could be placed in. My choice is to have it further back.

Some people said put it in Kuwait. Kuwait is awfully close to where the potential battlefield would be. I don't think that is where you want your headquarters to be.

We are looking at some other areas. There are any number of countries it could be in.

Finally, the question of arms sales. This is a very, very sensitive area, and I understand that.

There is a body of thought that says you shouldn't sell any arms over there. I do not agree with that body of thought, because right now arms are being sold all over the place and they will continue being sold over there.

Every one of those nations has the ability to purchase what they need, and they are going to purchase what they need. It is going to be available to them on the open market.

I am violently opposed to weapons of mass destruction. There is no need for missiles, no need for chemicals, no need for nuclear weapons and that sort of thing in that part of the world.

When you come down to providing weapons for their legitimate defensive needs, I think the United States of America serves itself well by participating in those types of sales for several reasons: First of all, if we don't participate, someone else is going to do it anyway.

When that happens, along with the arms sales generally goes an advisory position, generally goes the spare parts position, generally goes an ability to influence how those arms are used. If the United States does not play in that market, we have no ability to influence how those arms are used in the future.

I could make a good case that if you wanted to control the use of those arms, one of the best ways to do it is by providing the arms and then controlling the spare parts. We did that with Iran.

The F-14 is a good example. The Iranians had F-14's, but they were totally ineffective during the Iran-Iraq War because the United States of America simply did not supply the spare parts to them. Therefore, they could not be used.

Another example is the Soviets not supplying the spare parts to the Iraqis during the Gulf War. There are many aspects of this thing.

But I feel it is important that we play. I think that by being players—and unfortunately the way to be a player is by not saying we won't play, because in that case our advice will be ignored, and other people are going to have a great deal of influence in that area we would not have.

Those are quick answers to the areas you asked about.

The CHAIRMAN. Thank you.

Bill Dickinson.

Mr. DICKINSON. Thank you, Mr. Chairman.

General, I have one broad question that has sort of a recurrent theme in the media when Desert Storm/Desert Shield is discussed.

There has been some criticism—I say a lot of criticism—that we didn't do all that we could have done and should have done in the area, that we went in and we did not invade Iraq.

Saddam Hussein is still in power; he is still a threat; he is still in a position to control events in that area. He is worse off than he was, but he is still in the saddle, and so forth.

We started out with the premise, and as I understood the mandate, we were going to free Kuwait. That is how the coalition was put together, based on that premise, as I understand it.

We were told Syria would not invade Iraq. Probably not Saudi, probably not any of the Moslem countries, Arab countries there.

How do you react to the criticism that we stopped too soon? We let them get away or maintain their position and many of the articles of war that they had? He is still in power.

Why don't we go on in and clean the place up and get rid of him so that we can have peace there?

What would this have done to the coalition if we had done this?

What were the factors that forced us to the conclusion that all we did is all we should do, and anything further would probably in the long run be counterproductive?

Could you give us a discussion on that?

General SCHWARZKOPF. Let me start off with the first question of should we have gone on with the war, which is a question that has come up over and over again. It has always been couched in the context of should we have gone on 12 hours more, or 24 hours more, or 36 hours more, or something like this.

I would tell you that, in my opinion, having gone on with the war 12, 24 or 36 hours more would have had absolutely zero impact, zero impact on what subsequently happened in Iraq with regard to the Kurds and the Shites.

A lot of people forget Iraq did not have all their armed forces in Kuwait. As a matter of fact, they had 623,000 military personnel in Kuwait. They had 777,000 people still outside the Kuwaiti Theater of operation in Iraq. They had 42 divisions which were all destroyed in Kuwait, but they had an additional 26 divisions outside of Kuwait in Iraq. Those were the people that were the primary forces that were used against the Shites and the Kurds.

Today Iraq has a total of 30 divisions in the field. They have been able to reconstitute from the 40 divisions they had in Kuwait, four additional divisions to add to the 26 they already had for a total of 30.

Whether we continued the war for 12, 24, 36 more hours—it would have been irrelevant with regards to what happened to the Kurds and the Shites.

There are a couple of other points that are more important. Number one, the legitimacy for our military forces being in that part of the world was, in fact, the U.N. resolution.

The U.N. resolution did not call for, nor did it authorize, us to attack Iraq. The only alternative in my mind to preventing what happened with the Kurds and with the Shites would have been a full-scale invasion of Iraq. You wouldn't have stopped it otherwise.

I am not sure we had a legitimacy for going on and attacking Iraq and Baghdad. As I recall at this time, there was no one I heard advocating that we attack Baghdad and capture all of Iraq. Sure we could have done it, but I am not sure that is what we were sent over there to do.

I am not sure the world would support us. I am not just talking about whether the Arab coalition, but I am talking about the British and the French and the other forces there with us would have supported us in that regard. I think that is a very important thing.

Another important thing, is that we had accomplished our military objectives, our missions, what we set out to do. Further war would have simply been that. It would have been further bloodshed.

It would have been killing on the part of our troops, wanton killing and destruction. We were the ones doing it at that time, not the enemy.

I find there is a certain body in this country that forgets very quickly that right at the time we stopped the war, there were many people in this country that were already saying we had done too much of it. People talked about the so-called "highway of

death" coming out of Kuwait and the Iraqi forces that were withdrawing into Iraq, and that we destroyed them as they were withdrawing.

There was a great deal of talk that we had gone too far. Those same people are now saying we didn't go far enough. I think it is important to focus on the fact that we had a set of very clear-cut military objectives and we accomplished that very clear-cut set of military objectives.

One of those objectives was never invade Iraq, never invade Baghdad, nor for that matter, kick Saddam Hussein out of power. That was not an announced objective.

Mr. DICKINSON. That was not your charter.

A couple of narrow questions now. You never have enough good intelligence. What recommendations would you make there?

General SCHWARZKOPF. Well, first of all, let me say that the intelligence community gave us great support. They gave us great people. They had great systems. They worked very, very hard in supporting us.

I would never, ever say one bad word about the effort put forth by the intelligence community to support us.

There were a couple of things we discovered, first of all, within the military itself.

There is, I think, a lack of standardized interoperability between the services. We found the various services had different intelligence systems, intelligence data bases.

One data base could not interface the other data base. Particularly between, in this case between the Air Force and the Navy and they have acknowledged that.

Therefore, when we wanted to pass intelligence information between these sources, it became a very cumbersome and not a very timely process.

I should quickly say this was probably the only significant area of interoperability failure that we discovered, unlike Grenada where we discovered many, many more. Those have all been fixed in the meantime. This is one we need to address and look at.

I guess my major concern is I think that we need to develop a standardized methodology within the entire intelligence community for estimative and predictive analysis.

Probably my major concern as a theater commander was the fact that the analysis had estimates that were coming out of consolidated analysis, and by the time we received them, they had been caveated, disagreed with, footnoted and watered down to the point that the estimate could have supported any outcome.

When you were all done, no matter what the outcome was, they could say, "You see, we were right in our estimate." That is not helpful to a commander in the field.

I think there needs to be a combination of good facts, and then the facts need to be coupled with good analysis and the application of a judgment to go ahead and make a guess, which is what an estimate is, and a guess that would be helpful to the theater commander.

Mr. DICKINSON. One final question, if I may, Mr. Chairman, because I know it is a matter of concern to all of us.

What recommendations would you have regarding IFF (Identification Friend or Foe)? We had some breakdown, which is understandable, when you got to intermingle forces. It is something we have to address, something this committee has to address.

I wonder what recommendations you would make.

General SCHWARZKOPF. The most serious problem of all is that we have such great capability in aerial-delivered munitions now, you could bomb from 10,000 feet in the air through clouds in a heavy rain storm at night. That is the capability that you have.

But you don't have the capability when you are bombing and doing that to identify friend or foe on the ground. So I think that probably one of the areas that I would want to see focused on a great deal is how to use that tremendous capability to identify friendly vehicles on the ground. But do it in such a way that it doesn't point out to the enemy exactly where your friendly tanks are, also.

It is not an easy problem to solve so we experimented. You wouldn't believe the number of different devices we tried to put on our tanks and equipment to come up with a good system.

We never did get to that point. That was the problem. The technology of the weapons systems is so good that they can acquire targets at great distances.

How then when you acquire that target at a great distance can you tell whether it is enemy or friendly? We need a technology breakthrough to handle that.

The CHAIRMAN. We have a vote on. Because General Schwarzkopf has to leave at 4:15 or soon after 4, we want to take advantage of having him here. We will run the questions right through.

You can go and vote and come back.

Charlie Bennett.

Mr. BENNETT. I want to ask only one question and make a remark. I may have to go vote while you are answering the question.

The question I want to ask is about your observations about mine countermeasures and sealift. Please address those issues so I can read it in the record.

The observation I want to make is that a lot of praise has been given to you and the troops. You deserve every bit of it. But there is a little bit of praise that hasn't been received. I would like to give it.

I think the troops and officers and enlisted men performed in a gentlemanly, compassionate, understanding way when they were injected into a foreign culture, with a foreign religion and a lack of personal freedoms which they have not experienced in their own hometown and back home.

I think that it was an extraordinary accomplishment for the many thousands of people involved. People talked about the heroes on the battlefield and I agree with that 100 percent and the fact that they put their lives on the line and gave up the personal freedoms they have had in their own society and overlooked the strictures put upon them by a different culture and different religion, I think was really outstanding.

I hope somebody in the press will pay you the compliment because without you at the helm, it never would have happened.

There is one thing I would like to ask you to do. This comes from my experience not only in this war but wars before.

I have had to answer mail from people whose children died by friendly fire. I think that is a most improper term. Accidental fire, inadvertent fire, unplanned fire.

The mother of a son she has lost in the service doesn't need to hear from the military or read in the paper or read from the Congressman's letter that her son died from friendly fire. I think that ought to be corrected.

As you are a leader in the military, maybe you can say that is something I want you to do. I don't want letters to go out like that in the future. It is a painful thing for people that have lost somebody to encounter that word. It is not a very accurate word anyway.

General SCHWARZKOPF. I couldn't agree with you more. I have had a lot of experience with the term "friendly fire." I can assure you that there is no such thing as friendly fire. I don't think it is very proper.

Mr. BENNETT. Thank you very much.

The CHAIRMAN. You want to answer the other parts of Charlie's questions?

General SCHWARZKOPF. Let me start with the mine countermeasures.

As the theater commander, I felt for a long time there is a serious deficiency in the United States Navy in mine sweepers, and those that we do have are so old and so slow that they are almost ineffective.

Once they get there, they are incapable of doing the job. That was very much the case in this particular operation. We were, in fact, precluded from conducting certain operations because we did not have sufficient capability to sweep mines that had been laid out there.

There were a lot of mines. I will confess to that. Generally, I don't think we had the capability we needed. Therefore, I think that is one of the major areas that needs to be corrected in the future.

On the Army side, when we first got over there, we knew we were going to be faced with a terrible land mine problem. At the time, the Army was not well equipped. The units were not well equipped with mine plows, mine rollers, and certainly never did have the ability to detect the plastic land mine that does not react to overpressure.

Even if you shot a MICLIC out there and exploded it, the overpressures didn't set off the mine. That is a technological breakthrough we have to deal with.

It is a distribution problem of countermine equipment within the Army, and this must be corrected before we go into this type of operation again because mines have been around for a long time.

I encountered them heavily in the Vietnam War. We never did come up with a solution during Vietnam. I think we have good equipment now. I think it is a question of having enough of it on hand. That is something we need to look at.

On the sealift question, I don't think it came as a surprise to anybody. I have been advocating more sealift for a very, very long time.

Of course, during the crisis we had to depend upon just about every ship we could get from every country that could provide it.

I think that we are heading toward what I would call a contingency-based force. That is a smaller force but a more highly mobile force that will be going throughout the world projecting U.S. forces as required.

If we have to project our force, we are going to need more capable sealift. I would certainly emphasize the need and requirement for more roll-on, rolloff type, faster ships.

The CHAIRMAN. Thank you very much.

Ike Skeleton.

Mr. SKELETON. General, we thank you for appearing before us today. We compliment you on the superb role of leadership you performed for our country.

Back in 1923, Maj. George C. Marshall gave a speech bemoaning the doing and undoing of national defense and expenditures by our Congress.

You have lived through ups and downs in military expenditures through the years. We have a whole series of surprises, historically speaking, from the nonaggression pact between the Soviet Union and Nazi Germany back in 1939, down through the fall of the Shah of Iran and the surprise attack by Saddam Hussein into Kuwait.

In light of the uncertainty that history has shown us and using Maj. George Marshall's speech, the doing and undoing of national defense, in light of the drawdown, and the cutback of our military forces over the next 5 years by 25 percent, I would like to have your thoughts or your concerns over us doing that; and also, if you could, do you think we could carry on a Desert Storm at the end of 5 years with what we will have then, plus, heaven forbid, a major contingency somewhere else?

General SCHWARZKOPF. Let me start by saying you are absolutely right. During my 35 years in military service, I have seen a lot of ups and downs in the military. But I would tell you, sir, that I am convinced that the military we have today is far and above, I mean orders of magnitude better than the military that I joined back in 1956.

It is orders of magnitude better than the military we had in the Vietnam War, orders of magnitude better than the military we came out of Vietnam with.

It has to do with the outstanding men and women we have in it; number two, the outstanding ability of the technical equipment we have; number three, the superb training that goes on; and number four, a great training system that emphasizes and teaches the right things to young people. All of that resulted in a very, very fine United States military.

Could we go to war and do a Desert Storm over in 5 years? I have been asked the question a lot. The answer depends on what your assumptions are. If your assumption is that we will still have an all-volunteer military with the same quality of young people that we have today, if the assumption is that we will maintain our technological edge, if the assumption is we will continue to have all

of our units up to full strength, if the assumption is we will continue to use places like the National Training Center for training these forces—and I speak more on an Army basis than others because that is what I am most familiar with—then if you look at the number of divisions, the number of ships, the number of airplanes and that sort of thing that our armed forces are going to have 5 years from now and bounce that off the number we used in Desert Storm, the answer is yes, we could perform Desert Storm again.

If you say there is another major contingency going on someplace else—such as before, what we used to look at was a NATO war and a Southwest Asia excursion, then, no, we could not do it. But we couldn't have done it before either.

We paid a lot of lip service to that, but I don't think we ever thought we would be able to fight a major land war in the Middle East at the same time we were fighting a major land war in Europe.

Mr. SKELETON. What was your greatest pleasant surprise and your greatest unpleasant surprise in your experience as commander of the forces?

General SCHWARZKOPF. There were two of them. That the first night we launched the air campaign we sent all of those magnificent airmen in harm's way over what was the most sophisticated air defense network that I think we have ever faced in the history of the United States armed forces and they all came home.

When the numbers that were coming home were so great, I have got to tell you that I was overjoyed.

Probably the second most pleasant surprise I had was the day we launched the ground attack, and we were meeting with great, great successes. When the reports came back that we had so few casualties and at the same time we were capturing so many of the enemy and making great progress. Those had to be two of the finest moments.

The most unpleasant moment I had, I could facetiously say a few of the press conferences, but that is not correct. I really don't recall any moments when they were that terrible.

There were a lot of doubts. We all have got to be careful about taking counsel of our fears. When you are handed the responsibility for that many human lives, you can conjure up all sorts of monsters underneath the bed out there, and you worry about them, and you fret about them.

Then you go out and you try to do whatever you can to make sure those things don't happen. Probably some of my most unpleasant memories are when I think about what could have happened, those were the things that were my worst moments over there.

Mr. SKELETON. Thank you.

The CHAIRMAN. Mrs. Lloyd.

Mrs. LLOYD. Thank you very much, Mr. Chairman.

General Schwarzkopf, thank you for being with us today. You have our heartfelt gratitude for a job well done.

If you don't think you captured the heart and the spirit of American people, all you have to do is go outside and look at all the young people standing in line waiting to get in this room.

We have had a great deal of testimony, and we had a lot of hearings on what we have learned as a result of this conflict. But we

have not said a lot about what other countries might have learned, the hostile nations.

What kind of conflicts do you think we might face in the future based on what our adversaries have learned? Surely Iraq and other hostile nations would have done things a little bit differently if they had a magic ball.

General SCHWARZKOPF. Well, I think that is a wonderful question because you have to stop and consider what we were up against when we started.

We were faced with the threat of huge numbers of people. The Iraqi Army was far, far greater than ours. It had just been through a war in which they had come out victorious.

They had far more tanks than we had. They had far more artillery pieces. They were threatening us with chemicals and said quite openly they would use them against us.

Yet, despite that, America demonstrated to the rest of the world that when the cause is just and when we are asked to do something, that we will do it.

As it turned out, we were able, through our own technological superiority, to reduce a great deal of what we were talking about before. The U.S. military has been training since 1946 or 1947 to fight outnumbered and win.

I would tell you that, for the young men and women we have out there, it was nothing new to them to be going up against an army outnumbered 10 to 1 in tanks and 10 to 1 in people because they have trained all their lives to fight that way, and they are prepared to do it.

Personally, I would like to think that sends a message to a lot of people, that whoever decides to take on the United States of America again, that they can go ahead with all the bluster they want to and pound their chests and have huge numbers and threaten us with chemical weapons and everything else; but if the cause is just, if we have the support of the American people, we will go in there and do the same thing to them that we do to anybody else who decides to become a world bully or dictator.

Mrs. LLOYD. I think this goes into the next question I wanted to ask you. That involves the preplanning. I know you had a lot of pre-battle plans before you got involved in this conflict. I was wondering how close the pre-battle planning actually paralleled with the plan of battle you commanded?

General SCHWARZKOPF. Basically the contingency plans we had put together were designed to get forces over into Saudi Arabia to defend the oil fields of Saudi Arabia against attack by Iraq.

Those were the plans that we executed almost to the letter. It was almost identical forces that we had been practicing with, exercising with for about a year.

That is one of the reasons why we were able to get over there so quickly. It was because we had a very, very good plan that all of the commanders involved had been dealing with, and we were able to get the forces over there quickly.

When it comes to the second part, which became the offensive operation, that plan evolved while we were over there, as it became obvious that Saddam Hussein was not going to be pulling out of Kuwait and, of course, our mandate from the U.N. was to kick him

out of Kuwait, then it became necessary to develop an offensive plan.

We developed that offensive plan, and I have had to eat my words because I have always been one that has told young men and believe this very strongly, that a very, very good plan is only good until you cross the line of departure.

The minute you cross the line of departure, things happen that you never expected to happen. The plan then becomes a common point of departure from which you modify, and everybody starts at a common point. Then you send out instructions, and they modify according to the situation.

That didn't happen in this case. As a matter of fact, the plan was executed exactly as we had planned. The only difference was that we moved up our main attack about 14 hours earlier than we originally planned because things were going so well.

Other than that, we executed the plan precisely as it was originally conceived.

The CHAIRMAN. Mr. Montgomery.

Mr. MONTGOMERY. I want to thank you for accepting our invitation on May 8 to come to a joint session of the Congress and giving one of the greatest speeches that has ever been given in that chamber.

We were all pulling together. Thank you, sir, for those wonderful remarks.

I know how you feel, but for the record, I would like to ask you how the National Guard and Reserves perform under your command in the Persian Gulf?

General SCHWARZKOPF. The National Guard and the Reserve performed magnificently. Despite some of the talk you hear which would indicate otherwise, they did a superb job, and they were over there in very, very large numbers.

I would like for the record to state, for instance, in the Reserve forces, there were almost 40,000 from the Army, about 6,300 in the Air Force, 7,400 in the Navy, and almost 17,000 Marines.

But in addition to that, you had another almost 40,000 National Guardsmen over there in the Army and another 6,100 National Guardsmen there in the Air Force. They did a superb job.

They were a critical part of the total force package. Frankly, we would have been hurting if they had not been there.

Mr. MONTGOMERY. Do you like the total force?

General SCHWARZKOPF. I very definitely like the total force.

Mr. MONTGOMERY. One other question.

You mentioned the roundout brigades in your remarks. I am interested in that because one of the roundout brigades is from Mississippi.

I don't think we are too far off of what you are saying and what Secretary Cheney is saying about post mobilization and time needed for training. Can you comment about the roundout brigade of the National Guard.

General SCHWARZKOPF. When I was the Commander of the 24th Mechanized Division, the 48th Brigade of the Georgia National Guard was one of my brigades.

I considered them to be the Third Brigade of the 24th and I expected them to go to war with us when we went.

I said that in the context of the mission and timing of the 24th Division, that it would go into battle, the time from D Day until such time as they actually entered the battle.

That has always been the plan for the roundout brigades that there would be a certain amount of train-up time required for them before going into battle.

So I guess coming out of this experience my feeling is that and it applies to every single Guard and Reserve unit we have out there.

They are terrific people and patriots and there is a real place for them in the total force and they belong there.

What we have to do is be honest as to what the capabilities of the units are and have the units performed within their capability.

I don't think it is fair to expect a combat brigade to be ready on the first day of a contingency if it is a National Guard brigade as compared to a combat brigade in the Active force.

You have to understand that there is an amount of time that is going to be required for train-up in order to get them to a level that it is only fair to them that you get them to that level.

Otherwise, they are going to suffer inordinately if they go into battle.

I guess I have come to the conclusion that if you are talking about a contingency force that needs to be available immediately for battle that is not a good role to put a roundout brigade in, but that doesn't mean the roundout brigade can't be part of a sustaining force, a follow-on force deployed to be used later on in the battle.

Mr. MONTGOMERY. Thank you.

I would like to point out that there were Army National Guard men that did get into combat such as the artillery units and engineers.

General SCHWARZKOPF. Artillery, engineers, Marine Corps units, all did a terrific job.

Mr. MONTGOMERY. The Marines called up half of their forces, which was good.

Thank you, Mr. Chairman.

The CHAIRMAN. Duncan Hunter.

Mr. HUNTER. General Schwarzkopf, welcome.

Thank you for everything you have done for this country. I look at your testimony today as an end of an era.

The era began for me in 1981 when President Ronald Reagan began the rebuilding of America's national defenses.

I recall, as I read your testimony about the M-1 tank and the Apache helicopter and the Tomahawk cruise missile, it occurred to me that every time you spoke of those weapon systems and many others, you had good things to say about them because they performed well and saved American lives and accomplished the American mission.

But in reading *The Washington Post* over the last 10 years as a Member of Congress, I can remember no good articles about those weapon systems or many, many others.

Where you only had good things to say about the systems that performed well, they only had bad things to say about them.

I am reminded that the President, who began the rebuilding of national defense in 1981, was beaten down, called a military terror-

ist, a waster of moneys, a President who presided over a bloated military budget. But, ultimately his views were validated by the equipment and caliber of people you have spoken about and the leadership of you and your peers and colleagues in Desert Storm.

The defense budget continues to go down and it was put together at a time when we were operating under the illusion that the Soviet Union would be stable and that the world outside the Soviet Union would not be a dangerous place, before the war in the Middle East.

You are now a spokesman for a strong national defense and the American people trust and look up to you.

Without advocates for a strong national defense, I can see defense budgets continuing to decline.

Are you going to continue to be a national spokesman for national defense and foreign policy and do you have any plans with respect to having a career in that area where you will continue to speak up in this very important area?

General SCHWARZKOPF. I find it very difficult to envision myself in any position where I would be speaking against a strong national defense in the future.

The question of the national defense and the priority that is placed upon national defense is a difficult one.

As we increase the technology, the cost will go up. There are those who would advocate freezing the force where it is and expending all our money on the current technology and not progressing to future technology.

That would be a mistake.

Others say each time a new piece of technological equipment comes out, buy it and buy the next one.

That is not the right way to go.

The challenge is to continue to maintain the technological advantage we have that was absolutely critical in the war against the Iraqis.

If we hadn't had that technological advantage—when you read every military analyst, ancient or modern, they would have told you that we had no reason to attack because the correlation of forces was not in our favor.

Of course, they told Alexander the Great the same thing and it didn't bother him a bit.

But it is important to recognize that that technological edge is what allows the soldier, sailor, airman, Marine to go into battle with the sure knowledge that he can fight outnumbered and win.

If they didn't have it, they wouldn't be able to do it.

So it is something that has to be maintained, and I think we have to invest in the future at the same time if we are going to continue to maintain that.

As Satchel Paige says, don't look back because they may be catching up.

I think we have to keep that in mind in the defense business also.

The CHAIRMAN. Pat.

Mrs. SCHROEDER. General Schwarzkopf, let me join my colleagues in thanking you for being here. I was so pleased with your speech when you were so inclusive of the men and women that helped.

I was very proud of this committee, as was Congresswoman Byron when we dropped some of the combat barriers, but was disappointed this morning when the Army said they didn't care what we did, they liked it the way it was.

General SCHWARZKOPF. That was the outgoing Chief of Staff.

Maybe you ought to talk to the incoming Chief of Staff.

Mrs. SCHROEDER. Another question: In the burdensharing area that I have been so interested in, I notice the figures that came out yesterday the two countries that seem to have fallen down the most in contributing their percentage share were Kuwait and Saudi Arabia.

That is always hard to explain as you are out and about in America.

Do you have any reason why they would be so slow in paying up?

General SCHWARZKOPF. The numbers I have indicate that the UAE, Japan, Germany have paid out nearly everything they promised.

Kuwait and Saudi Arabia, out of 16.8 billion, Saudi Arabia paid \$11.76, and still has a balance due of \$5 billion, and Kuwait out of \$16 billion, has a balance due of about \$4.9 billion.

I would tell you that there is no question in my mind that those two countries will be contributing what they promised to contribute.

I also know that there are serious economic cash problems in Saudi Arabia as a result of the war there.

Not only did they offer assistance in kind and these payments to us, but they also did to many, many other countries that came over and participated, including all the Arab countries.

I think it is a matter of record that the Saudis had to go out on the international market and borrow money to maintain the payments.

So it is a question of putting it together as a package.

We have to be fair, particularly to the Saudis and recognize the enormous contribution that the Saudis made to the effort of the U.S. military forces there.

They provided 100 percent of our fuel for free.

If they had not done that we would never have been able to do what we did in the amount of time we did it in.

They provided all the water.

They provided food. They provided transportation that we didn't have and, of course, their facilities alone were magnificent.

Someone would say, "Of course, because you were defending their country." But the fact remains that they made enormous contributions to the military forces that are very helpful to us doing the job.

I think it is a question of time and getting it together before the payments are made.

Mrs. SCHROEDER. I hope you are right because there has been Japanese and German bashing and they have done a better job of paying than the Saudis and Kuwaitis.

Is there anything you can say in open session about the Iraqi nuclear physicists around saying the U.S. did not hit their nuclear capabilities in Iraq?

General SCHWARZKOPF. I don't think he said exactly that.

I think he said we hit—I believe the numbers that I have read in the open press were 40 percent or something like that—that 60 percent survived.

I don't know about that.

We had reports all through the war, before the war and all through the war, that up in the northern part of Iraq, there were huge buried caves and caverns where they had underground air fields, underground facilities and factories and that sort of thing.

Obviously, we took a very careful look at that entire situation and we never found any evidence of it.

Normally, in cases like that, you can find evidence that that exists.

Other than Chuck Horner, the Chief of the Air Force, who told me that he was astounded when he flew over Iraq at what a totally built-up military camp the entire country is; it is bunker after bunker, no matter where you went in the entire country.

So I cannot discount the fact that they are there.

But I can tell you that as far as every single nuclear target that we were aware of within that country, it was very seriously damaged or destroyed, and I am quite confident of that.

Mrs. SCHROEDER. Thank you.

I am sorry my time is up.

The CHAIRMAN. Bev Byron.

Mrs. BYRON. Thank you, Mr. Chairman.

General, welcome.

I am not sure you look more comfortable today than the last time we saw you in the desert.

You fit that role very comfortably.

Saturday was a glorious day for those young men and women that you commanded.

We all had an opportunity to have some of them stop by our office wandering in wide-eyed looking at Washington, and we told them to enjoy it to its absolute fullest.

It didn't happen often and this was a once-in-a-lifetime opportunity for a Nation to greatly, respectfully salute those young men and women.

As one whose father went off in 1942 in the military in a Reserve capacity, I have concern about the active duty versus the Reserve and the Guard and the family separations and the difficulty of the Guard and Reserve coming back as quick as possible.

I fully understand General Pagonis' problem with the logistical and the cargo units which we have put into our Reserve.

I do have problems with some of the MP Reserve units, some of the ordnance Reserve units that are still there, have been there for quite a while, and will not be deployed home until August or September because we have Active units that were not deployed that could pick up those jobs.

But basically, I think what I would like to ask you is, we are beginning to start our hearing cycle on lessons learned.

As you know, I chair Personnel, and I think today we probably have some of the finest people who have ever been in uniform, very few category 4's, a different kind of military than we have seen before.

In the HMMWV's, you found pictures of wives and children pasted up, helicopter pilots and cargo handlers with the back of their helmets with a photograph of a wife or child so it was a different type of a war effort.

But as we look at that different type of a war, we are looking at a family structure and we are looking at a Reserve and Guard call-up in a magnitude not seen for quite some time.

I am concerned about our active duty force and the integration of the Guard and Reserve.

We hear rumors that the Reserve units didn't get the equipment they needed, the Active duty forces took the winter jackets, the long johns and heavy-duty sleeping bags and the Guard and Reserve units were left to fend for themselves.

A supply sergeant is worth his weight in gold because they are the ones that can beg, borrow and steal from your neighbors.

How are we going to address a cohesiveness between the active duty force and the Guard and Reserve?

General SCHWARZKOPF. I think we already have it.

I have heard the reports that you mentioned, but I would tell you that as a theater commander, I investigated every one of them to see how much substance there was to it.

I didn't find a lot of substance.

Many are service matters and the services are dealing with them directly and I am not aware of the outcome.

If you looked at General Pagonis' command, he was proud of the fact—

Mrs. BYRON. The instances we heard about were in the field in the forward-deployed units.

I have one more question and you can take as long as you want to answer.

The concern that I have is for the health of our troops currently in Kuwait City.

The units that are dealing on a daily basis with air pollution of the fires, I am terrified that 10 or 15 years from now we are going to be dealing with another Agent Orange potential for those troops?

General SCHWARZKOPF. I am too, and we have spent a great deal of time and energy looking into that subject.

Let me give you an indication of a number of organizations looking at that.

We have had Interagency Area Assessment Teams, EPA, the National Oceanic and Atmospheric Administration, Health and Human Services, British Meteorological, the Meteorological Environmental Protection Agency of Saudi Arabia, the King Fahd University, the Ministry of Health, the DOD Tri-Service Working Group, Army Environmental Hygiene Agency, and ARAMCO, all going there to look into this.

We constantly sample the air.

The British have been good about taking air samples to make sure toxic gasses are not there.

Everyone says short term that there is no danger.

We also, in positioning our forces, have been careful to position them in places where we get them out of it as much as we possibly can.

I cannot state with certainty that there is no long-term threat, but I can tell you that based upon all these agencies continually checking, there does not appear to be an immediate hazard so long as they don't stay there forever and the plan is that almost all will be home in the September-October timeframe.

They are coming home on a continuous basis, but the people now in that area are all going to be out and we are introducing a new force in there now, so all there now will be out and the new force will be there for the summer and they will be out in September.

It is a short-term problem, but it is not one that we are ignoring.

Mrs. BYRON. Thank you.

The CHAIRMAN. John Kasich.

Mr. KASICH. Thank you, Mr. Chairman.

General Schwarzkopf, let me first congratulate you on having such an able assistant who did a great job conducting us through the desert.

There was a great article in *Newsweek* about the role of the special forces, which Bill Nichols and Dan Daniels, who are not with us, helped to put together along with Ike.

I want to talk to you about why I supported the President.

I supported the President because the President basically said that he was going to have this new world order which was going to establish the law of humanity over the law of the jungle.

So we went in there basically to make it clear to despots all over the world that we weren't going to tolerate the settling of problems in the new world on the battlefield, but rather at the negotiating table and we were going to teach them a lesson, and by doing it in a military way we taught them a lesson.

But there are a couple of things that I would like to have your opinion on, which I think further teaches the world a lesson and may put us in a position to be able to avoid wars.

Do you think that Saddam Hussein ought to be prosecuted for war crimes along with the rest of his commanders?

I wouldn't suggest that the United States do it on their own, but that the United States pursue it through the U.N., the coalition and the World Court. We ought to try to apprehend and pursue war crime trials to make it clear that if people are going to commit war crimes—and I went to Kuwait City right after the war and I understand why those people were so excited when we liberated them.

It didn't have anything to do with freedom. It had to do with their own survival.

Their families were being taken out and tortured and killed and they thought they were next.

I think if we are going to teach lessons to despots, the first lesson is not only that you are going to be held accountable as a Nation, but you who give the orders, who commit war crimes ought to be held accountable as well and put on trial.

That is number one.

Number two, in pursuing Saddam Hussein for war crimes, would it not then energize the world to be able to take actions against other bad actors in the world before we have to put a half million troops in the battlefield?

For example, Kim Il-song, in North Korea, is developing nuclear weapons and you know the kind of threat that we face there.

If we were able to pursue Saddam for war crimes, we can energize the world community to be able to act preventively, because an ounce of prevention is worth a pound of cure and then maybe the world would be able to speak authoritatively to other thugs that we have in the world who have designs on other countries and we would be able to act in a preventive way.

So the first question is prosecuting Saddam for war crimes and setting that precedent for others; and second, so that the world can act against other bad people.

I was very disappointed in your answer about arms sales. It is so ironic that the French sat in the Gulf with the greatest threat against them being an Exocet missile that the French sold to the Iraqis.

One lesson we learned is that the entire world armed Saddam Hussein.

Shouldn't the President—try to have an international conference on arms sales.

You say we cannot unilaterally do this because others will sell, but the biggest sellers of the arms in the world are the Chinese and the Soviets right now.

The Chinese want an MFN agreement. The Soviets want \$100 billion in aid.

Czechoslovakia has no business becoming a major arms merchant.

We can put pressure on all of them.

John Major argues that we ought to have a registry at the United Nations to make notifications about who is getting arms.

But the Syrians are going to have a long-range missile that they are now acquiring from the Chinese.

What I am afraid of is that if we don't clamp down on arms sales by forcing the entire world to stop this escalation of technology in the Third World, we could see a nuclear war between India and Pakistan.

We could see us threatened with long-range missiles from Syria.

So shouldn't we take a bold step in new world order and make an effort to stop the sale of these sophisticated weapons, not only conventional weapons, but weapons of mass destruction as well?

If we are really going to have Bush's vision of a new world order, wouldn't it take us to do these things?

General SCHWARZKOPF. I will say it again.

I think I made it very clear that I am opposed to weapons of mass destruction. I am opposed to long-range missiles, to chemical warfare, to nuclear warfare, and I believe what I said is every nation has a right to have its legitimate defensive weapons.

I support the President's program and that is what I just said.

So I did not allude to the fact that I in any way support those types of weapons for any of the countries that you mentioned or anybody else for that matter.

Mr. KASICH. What about more conventional weapons? We are giving F-16's to Egypt.

General SCHWARZKOPF. At the present time, if we don't give them to Egypt, somebody else will.

I don't think it is in the best interest of the United States for someone else to arm them over there and for us to have no ability to control them.

I think it is a fine thing if we go for responsible arms control if we look for control by all the major providers of arms, and that is the President's program, but until such time as that happens, for the United States to unilaterally abrogate any responsibility in that area, I think is a big mistake because that then makes us a non-player and we have no ability to control the use of those weapons, and that is my point.

As far as Saddam is concerned, he is a criminal. I agree. I wish Saddam all that he deserves and the sooner the better.

But I would also tell you that it is very difficult for me to imagine how a world process is going to unfold where the world, whatever world body it is, because it has to be a world thing, it is not—it has to be a world order to cause something like that to happen, and it is very difficult for me to envision the nation of Iraq today handing him over and his fellow officials.

In principle, I agree with you, but the practicality of causing something like that to happen short of us invading Iraq, it is difficult for me to see how it could be carried to fruition.

The CHAIRMAN. Nick Mavroules.

Mr. MAVROULES. General, thank you once again.

You mentioned in your prepared text that a number of Members from Congress had visited the theater at one time or another.

I remember talking with you the last week of November with 18 other Members.

I want to thank you and congratulate you on your candor and the integrity with which you put forth just what the situation was over there.

We appreciated that very much.

A number of us had the opportunity to go back 6 or 7 weeks ago for Operation Provide Comfort.

We have the same pride that you do with our American military personnel and State Department diplomatic corps, for the magnificent job that you and others have done.

I want to congratulate you.

I have one concern I would like to bring up to you. Although the war was extremely successful, we still have an individual who perhaps had the third or fourth largest military in that theater—perhaps Syria or Turkey might have more than he does at this time—but he still retains a pretty good military.

As of this morning, if the report is correct coming out of Baghdad through CNN one more time he is now massing 100,000 troops in the southern part of Iraq perhaps to take on the Shiite population. You and I know if he ever opens up on that population, that is going to be outright slaughter.

Although you don't set foreign policy, I wonder if you would share with us your views on what we would do as a Nation, not only on the Shiite problem, but say 6 months or a year down the road after they think they have an agreement with the Kurds and he should open up on the Kurdish population. Can we allow a mad man to remain and roam free.

I wonder if you would share your personal views rather than a foreign policy view.

General SCHWARZKOPF. Yes, sir. This is a blinding glimpse of the obvious, but the Middle East is a very troubled area, and has been for years. I jokingly say that Schwarzkopf's first law of field politics is that any place you see a straight line for a boundary, it was drawn by a colonial power and therefore has no relevance.

The Middle East is full of straight-line boundaries drawn right through the middle of tribes and religious and ethnic groups, and that was the creation of many of the problems that exist in the Middle East today.

If you look at the average Middle Easterner, the family is the most important thing to him; the second most important thing, the extended family, and the third is the tribe, and the national identification is basically in many cases not important to them at all.

So when you start drawing boundaries through tribal lines, that is well and good, but the people of those tribes don't understand it, and that is basically what has resulted in many of the conflicts, and the Kurdish conflict is a typical example. It is a problem that has been around for 100 years and a problem that is probably going to continue until some day some way the Kurds end up having an identity and an autonomy, and that is what they are trying to establish today.

I am saying there is no instant solution to the Kurdish problem. There is no instant solution to the Shite-Sunni problem. The central Government of Iraq is Sunni predominantly. Sunnis are 30 percent of the population of Iraq, therefore they are deathly afraid of the Shites taking over their country. So are a lot of other people in the Middle East.

The last thing they would want to see is a Shite Government in charge of Iraq that would align itself with Iran and threaten the other nations in the Gulf. These are old animosities, the Iraqis and Iranians have fought each other for 3,000 years, and probably will continue for 3,000 more years.

It is a very difficult problem, and I am not too sure that the United States can enter into this problem, and there are not instant solutions. Our mission under the U.N. charter was to kick Iraq out of Kuwait. That is what we did. It was not to eliminate Saddam Hussein.

Could we have done it? Yes. Could we have prevented the massacre of the Kurds, yes. Could we prevent further massacre of the Shites, yes. But there is only one way you can do that, and that is to invade Iraq. You would have to capture Iraq, take Baghdad, overthrow the government, and set up something new, and that was never our intention, and we never had the mandate to do that. That is a long answer.

The CHAIRMAN. Earl Hutto.

Mr. HUTTO. Thank you, Mr. Chairman.

General Schwarzkopf, I am very pleased that the Congress has voted to award you the Congressional Gold Medal. You deserve it. Congratulations to you and the troops for the tremendous job you did for our Nation. Most of us have had a chance to eat some MREs, not too bad. The Army troop feeding system experienced some real problems due to the lack of T rations.

The Army planned two hot meals per day supplemented by one MRE. However, the Army was unable to meet its plan. Many soldiers were fed three MRE meals per day for months while others were served two. The constant menu of MREs led to a lot of complaints and discontent.

What was the cause of this problem, and what needs to be done to correct it? Is the Army addressing this issue?

General SCHWARZKOPF. Yes, sir. A decision was made a number of years ago in the Army that as a result of many, many technological advances, I guess the best example I can give is the airline industry, where you can get on an airplane and a flight attendant can take a prepared meal, heat it and serve it to the people on the plane, and only 50 percent complain.

The Army felt that there may be a way to in fact gain more spaces by getting rid of the cooks and the people that run the dining facilities and going to that feeding system. There was a decision made to serve two T rations and one MRE a day as a standard fare and, as a result, they did away with their cooks.

The industrial base was not there to support the T rations. They could not supply the Army with two T rations a day during the Gulf war, and as a result, the Army went to two MREs and one T ration and had difficulty with that.

I think the Army has learned that airline meals are fine as long as you don't have to eat them every day of your life. If you do, it turns out that they are not so red hot, either, and that is not an attack on the airline industry food feeding system at all.

I feel that the Army needs to take a very hard look at its entire field feeding system, because like Napoleon said, an army travels on its stomach, and that doesn't mean MREs as far as I am concerned.

Mr. HURRO. Following the conflict, you made the statement, an absolute gigantic accomplishment, and I can't give enough credit to the logisticians and transporters who were able to pull this off. Also, in your prepared statement, you mention the famous "left hook." What made this deployment and mobilization different from other past conflicts?

How successful were the logisticians in meeting your requirement to get people and equipment into the theater, and once hostilities began, what were your objections with regard to the logistics tail that supported the rapid movement of our ground forces?

General SCHWARZKOPF. To paraphrase an old quote, in times of peace, everybody wants to be an operator, but in times of war, everybody focuses on being a logistician. That is true.

In the case of the Gulf war, we could not have done the job without the superb performance of the logisticians. When you consider we moved about 9 million measurement tons of equipment 7,000 miles.

Once you got there, you had a country with fantastic port facilities to unload, but from the port to the front, you had two roads, rudimentary at best, and had to bear a huge amount of traffic.

Yet, the logisticians were able to push those supplies forward to where we could use them. So they deserve all the credit in the world. I learned that as a commander I better start paying more attention to trucks. We begged, borrowed—didn't steal, but requisi-

tioned every truck we could get our hands on in the theater, and we had the darnedest collection of drivers from every nation in the world that we mustered every morning to drive the trucks.

Without them, we wouldn't have had enough supplies forward to launch the war. It is superb host-nation support coupled with great American ingenuity and well-trained logisticians that put this together.

It is something worth addressing, making sure in the future as we build our force structure, we don't ignore the sustainability that is so important, and the mobility tail that goes with it.

The CHAIRMAN. Bill Weldon.

Mr. WELDON. Let me add my thanks, General, and say that as a General, you have been superlative. I think what came through for the last 9 months was the personal side of you, your compassion, your commitment to your troops, and because of that, you have become a real role model for our young people in this country, and we applaud you for that.

I have three questions. The first deals with the extensive hearings this committee held in December before the vote on whether to support the President in the use of force. I think the chairman was probably at his finest. We had 3 weeks of intensive hearings, former Ambassador Akins was here, and Judith Kepper, all testifying, and former Ambassador Jeane Kirkpatrick.

One week was devoted to diplomacy, 1 week to military options, and a third week to sanctions.

We heard witnesses tell us that we should wait, that we should not support the President, that sanctions would work eventually.

All the time we heard so-called experts here; while you were in the desert with the troops, they were saying, "Don't worry. They will be able to stay there whatever it takes and eventually we will prevail."

I would like your response because you didn't have a chance to come before us in December before that decision was made to convince us of what your feelings were as the general responsible for those young people in the desert during that time period and would have been there if sanctions were still in place at the time.

Before we committed our troops to war, the pundits said that Saddam's military was not Panama. This was a formidable army, the fourth largest in the world, and there would be tens of thousand of lives lost on this side, and we should be expressing our great concern and should hesitate because of that.

Now that the conflict is over, some of those same pundits say we overrated the Iraqi military. It never was the kind of military that everyone said it was.

What is ironic is that some of the same people are saying those same things after singing a different song before the conflict.

What is your assessment of Hussein's capabilities prior to the war and today?

Finally, this was my most troubling question during the conflict as someone who supported the President, having to do with the fact that when the aerial campaign started when many of us thought the Patriot batteries were in place in Israel, we found they weren't there.

There was finger pointing back and forth between the Israelis who said it was our fault and between our people who said the Israelis would not allow Patriots in if they were accompanied with American military personnel.

Why weren't the Patriots there when the aerial campaign started?

General SCHWARZKOPF. Let me start with the Patriot question.

Israel is not in my area of responsibility, so I am giving you very basic information which, if you need more information, you should go to General Galvin.

Patriot batteries were scheduled to go into Israel. There was a time schedule in which they were coming in.

The way we normally send air defense weapon systems to a country is we take the people receiving the system, we train the people on the system and that system deploys into their country with their own country nationals on the weapon system.

That was in process at the time the war began, but hadn't come to fruition, so that is why the Patriots weren't there.

Let me go back on the question of underestimating, overestimating.

The Iraqis were exactly what they appeared to be at the beginning of the war. They were a very large Army.

It was a battle-tested Army, an Army with a huge number of tanks and armored personnel carriers, that had missile and chemical capability and was an effective fighting force.

It outnumbered the forces that we had over there.

Why did we prevail? The first reason we prevailed is because we designed a campaign plan that was definitely designed to do exactly what it did, and that was, first of all, break the ability and the will of the Iraqis to fight and once we had done that then we would fight them on our terms.

We had many complaints from the Iraqis that we didn't fight fair when we outflanked them and attacked them from the rear.

We did not fight fair because we did not attack them frontally into their trenches, into their minefields, into their barbed wires, and fight on their terms.

The reason why we succeeded was because we put together a campaign plan designed to capitalize on our strengths and take advantage of their weaknesses so we could break them down and be able to fight them.

They didn't have 600,000 people.

That is fine, but if you go back to the strict correlation of forces where you are supposed to have three or five to one in order to conduct the offensive, we would have had to have from a million to two million at arms if we were going to fight them offensively.

Obviously, we weren't going to do that.

So that is why we succeeded against the Iraqi armed forces. They were a good armed force, not a great armed force.

They were nowhere near as well-trained as we were.

They didn't have weapons as good as we had, but they had huge numbers and we whooped them, its that simple.

The sanctions had a great deal to do with it.

Mr. WELDON. The first question had to do with where would you be today still sitting in the desert with sanctions still going on.

Give us your military assessment of the problems you would be encountering today—

General SCHWARZKOPF. I think I am on record as saying that it was not in our best interest.

We had the forces there. We had them trained up to a certain point.

Once we got them trained to that point, they were ready to go.

I am one of those in the early stages who was accused of being a dove, and I was accused of being a hawk and everything in between, and I made the statement that as a military man, I am the last one that wants to go to war because I know what war is all about.

I don't want to see the young people killed.

On the other hand, when it becomes apparent that you have to go to war, you prosecute the war as quickly as possible and save as many lives as you can by doing so.

The objective was to get Saddam Hussein to pull out of Kuwait. As long as it looked like the sanctions might succeed, that was probably a proper course of action.

When it became obvious sanctions wouldn't succeed, then we had to do something else and we were prepared to do that.

That is not my judgment to make. It is the decision of the President of the United States and it is my job to support him when he makes that judgment.

Mr. WELDON. You handled that answer very well.

General SCHWARZKOPF. That is the only answer I know.

The CHAIRMAN. Danny Hertel.

Mr. HERTEL. I remember, General Schwarzkopf, we were in Saudi Arabia with Nick's group in November when you spoke the same way.

You did say then that you were the last person who wanted to go to war, that it was up to the President and the Congress to make the decision and that you would do the best job you could.

I was very impressed that day because instead of giving us a lengthy briefing, you spoke to us for 4 minutes and you took questions and answered them directly for 2 hours.

There was no sugar-coating. You were very direct.

We could see as has been said today already your great concern for the men and women you commanded, their daily lives and the fact that you wanted to protect them as best you could.

We are also impressed by your staff and your commanders also having the same feelings.

As worried as we were about what might happen, we knew the best possible decisions would be made for our forces.

We appreciate that.

I want to ask three questions.

With your great experience in the region of the world, what was the hardest part of keeping such a complex and diverse coalition together over that period of time?

Second, should we in Congress be making sealift more of a priority?

Thank goodness there were no accidents or shortages—logistics are very difficult, as General Pagonis told us.

What should we be doing in that area?

Third, through this entire experience, what surprised you personally the most?

General SCHWARZKOPF. Let me start on the coalition first.

The coalition wasn't as hard to keep together as you might have imagined.

I think that we have Saddam Hussein to thank for that because not only did he manage to alienate everybody in the beginning, but by his every action he continued to make everybody mad at him so there was a great commonality of purpose that existed in the coalition to begin with.

Within the coalition, we went into it on a co-equal basis.

Anytime anyone had a problem, we were willing to discuss it, work it through and come up with what was the right solution in order to get on and do the job.

As long as every member of the coalition understood clearly that we all shared a common purpose, it was easy to work through the problems that came up because you came back to focusing on what do we need to do to get Saddam out of Kuwait.

As long as it came back to that common objective, we were able to work it out.

It involved a whole lot of hand-holding and late hours and talking and diplomatic maneuvers and begging and borrowing and everything else, but it worked, and that is how we held it together.

With regard to the biggest surprise I had, I still say that the biggest surprise was when we launched the air attack and they all came back, and when we launched the ground attack, that we were so successful. We were going against a big armed force and we were concerned with the casualties. To my dying day, one of the finest surprises I had was the fact that we had so few.

Mr. HERTEL. What you did there that day was give us a civics lesson, and one today with regard to my friend Curt Weldon's questions, the Congress and President decide the policy and you carry it out. It was a civics lesson then and today, because you are telling us the Armed Forces are there to do the best job to defend our country and the decisions must be made and the responsibility must lie with the President. The question was about sealift.

General SCHWARZKOPF. We need to do something about sealift. I agree with General H.T. Johnston who says that we need to have more roll-on roll-off ships in the fleet. We went there and grabbed just about every boat that was available. All shapes and sizes were used to get there, and that is not the most efficient way to go to war.

If we are going to be a contingency-based force prepared to deploy to trouble spots in the world, we have to have the ability to get there better than we can today. I think that needs to be addressed.

The CHAIRMAN. Mr. Sisisky.

Mr. SISISKY. Congratulations. When I met the General in the room out there and I said "I'm Norm Sisisky," he said, "Another Stormin' Norman." Everywhere I go they call me Stormin' Norman, and we are the same size.

You said something just now about sealift, and in your remarks you talk about mine countermeasures. I assume you are talking about land mines in that. Am I correct in that?

General SCHWARZKOPF. Both land and sea mines.

Mr. SISISKY. I don't really understand what is happening. We are not military geniuses on this committee, but by sitting here, we absorb a lot that happens. We have proposed money for fast sealift for 4 years. Nobody ever spends it.

I personally wrote into the Armed Forces bill I think 5 years ago about mine countermeasures, and nobody seems to care really, or do anything that is really different.

How can we motivate them. We write it in the bill, we talk about it in subcommittee meetings, and some way or another somebody is going to make a study of it. When they say to make a study of fast sealift, I guarantee that you and General Pagonis could do the study in 5 minutes and tell them what they need. We have \$1.3 billion in the account and nobody wants to use it.

As I said, as you are leaving this career, I have some concern about our forces in Europe and the role of NATO. I know that is out of your realm, but I would like for you to comment about the importance of NATO and our troops over there because certainly that is prepositioning supplies. You got a good deal out of it, and whether you think in the next decade we need to be in Europe. Because I think that is going to be a big debate. I can see it coming not only from here but from over there, too.

General SCHWARZKOPF. That really is not my area of responsibility and I would hesitate to walk into Jack Galvin's pasture. He is liable to cut my leg off if I do that.

Personally, NATO is a great success story. We never could have done what we did in the Gulf if it hadn't been for the fact that we won in the confrontation in Central Europe. By virtue of the fact that the Soviet threat diminished in Central Europe, we were able then to take the forces out of Central Europe, something that nobody would have imagined we would have done 2 years ago, and move forces to the Middle East.

I think there are several points there. One, we couldn't have succeeded if we hadn't won in NATO. NATO was a successful deterrence and led to the situation we have today vis-a-vis the Soviets. A lot of people said we were wasting the forces in Europe, and that turned out not to be true. We were able to move them.

There is some utility to NATO. All the NATO nations have to address what is the utility of NATO and the future. I don't think it is something that we should pull out of unilaterally. I think that would be a serious mistake.

Mr. SISISKY. Have you had any input into the current Total Army Analysis 1997 study?

General SCHWARZKOPF. Indirectly, yes, but not directly.

Mr. SISISKY. Has your experience in the Gulf led to any personal conclusions about the proper ratio of Active to Reserve forces?

General SCHWARZKOPF. Yes. I think I covered that before. I don't want to get hung up on a ratio. I don't want to get hung up on numbers.

I think the most important thing for us to do with regard to Reserve components is to honestly look each other in the eye and say, what are the capabilities of our units, where can they perform the best, and tailor the forces based on the capabilities of the units, not on some arbitrary ratio saying you have to have x number of Re-

serve, x number of Active. I think that is the wrong way to go about it.

You need to say, what are the capabilities of all the units across the board to serve our national defense, and that is the basis on which we should make our decisions of who should be doing what.

Mr. SISISKY. Thank you.

The CHAIRMAN. Jim McCrery.

Mr. McCRERY. Thank you, Mr. Chairman.

General Schwarzkopf, unfortunately for you, you have had to sit here and look at us for the last 2 years or so. We have had the opportunity to look behind you, and the parade has been unending; people, citizens, coming in to look at General Schwarzkopf. You should be complimented by the line of people in the hall and the hundreds of people who are waiting out there to see you, just to get a glimpse.

You are truly a national hero. We certainly appreciate your coming to visit with us today.

General SCHWARZKOPF. I am one of 541,000 heroes.

Mr. McCRERY. Yes, that is correct, but you are probably the most recognizable of those 540,000.

I want to talk with you a little more about the Guard and Reserve. You may not have followed the legislative activities this year with respect to the authorization and appropriations bills for defense, but there has been some debate about drawing down Active duty forces vis-a-vis the Reserve and Guard forces.

The administration, as you may know, suggested a one-for-one draw down, one active duty, one Guard or Reserve. The House, at least, has decided not to do that and has voted to draw down the active duty forces almost exclusively.

I would like to know your comments about that general concept of draw down over the next 5 years, whether it should be, without getting into specific numbers, whether it should be more on a one-to-one basis or something different.

I would like for you to comment further on the use of combat roundout brigades. You stated earlier that we should not expect those roundout brigades to be ready immediately for combat duty. We should give them some amount of time to train and get prepared to go into combat.

I would like to know how much time you mean and I would like for you to comment on the fact that in this particular engagement, the Army chose what were supposedly the three most ready, most prepared roundout brigades for involvement in the Persian Gulf. After several months of intensive training, not any of those three were used in combat.

That concerns me if we are in fact going to depend on the total force concept to prepare this Nation for war, if necessary.

General SCHWARZKOPF. Let me address the first part of your question.

Again, I think it is a terrible mistake to look at the total force mix on a basis of one-to-one, one-third to one or anything else. We better look at the total force mix on the basis of what is best for the national defense. That should be the only criteria against which we judge the total force mix, not anything else.

It is like every other subject when you start talking about the Armed Forces. There are a lot of things that are nice to have. But what is most important about the Armed Forces is the vital necessity that the Armed Forces are there for one and only one reason; that is, to defend our Nation or to fight our Nation's wars.

That is the only basis upon which I address the Guard and the Reserve and the Active force mix. That is based upon what is required for this Nation for the defense of this Nation and who can do the job.

It is just that simple. I really can't get into a discussion of one-to-one or numbers drawn out. It is a very complicated issue. The roundout brigade issue is a typical example of what we are talking about.

When the subject of the roundout brigades initially came up, it was for a 6-month call-up only. When I asked the forces command commander how long will it take for the roundout brigades to be available, he said about 4 months.

As a commander in a theater, it doesn't help me to get a unit in my theater in 4 months that I have to send home 1 month later because they have to be mustered out. I realize there are all sorts of different ways to activate the research components, and I realize different people are responsible for different numbers and different declarations can be made.

I don't want to get into that. I am saying the reality of the initial call-up of the roundout brigades was based upon their status and training, the estimate was made that they would not be available in the theater for 4 months.

It turned out that was about right. The numbers I have say that the 48th Brigade took about 2 months of training at the National Training Center, 63 days, to be exact, to be trained.

When you figure callup time to bring them into active duty, to muster them, assemble them, send them out to training, to train for 63 days and then to deploy from there to the port and then transportation over to the theater, it probably would have taken 4 months for them to get there at that time.

That was the basis upon which the decision was made, as I understand it, not to call them up in the very early days of the war simply because they would have to be sent right home again as soon as they got there.

Again, the roundout brigade concept is a viable one. I have no problem with the roundout brigade concept. I am proud of the 48th Brigade of the Georgia Army National Guard. I will always consider them to be a fine unit. The reality is that they were not immediately available.

They must receive a certain level of training before it is prudent to introduce them into the combat theater. It is a complicated system. I would tell you it is very interesting. The Reserve artillery units did an outstanding job over there, and the Air Guard did an outstanding job. It is a different kettle of fish. To take an individual and put them in an airplane he loves to fly on the weekends, he goes down there and flies all the time and he maintains a high state of training, it is a lot different to take an entire tank battalion, load them up in their tanks and go driving out across the countryside.

There are not a lot of farmers in Georgia that want that to happen. Therefore, an armored battalion can't be trained that easily in a peacetime environment, particularly in a Guard and Reserve environment. That probably is one of the most complicated maneuver organizations to put together and train up to the point where they are going to be effective in combat.

It is a tough, tough proposition is what I am saying.

Mr. McCRERY. I am from Louisiana. We had one of the roundout brigades called up. I am very proud of them. But I think we owe it to the country to examine very closely that the concept of using roundout brigades for active duty purposes in a wartime situation.

We ought to analyze how much time we expect them to have to get ready, whether it is 3 months or 4 months, whatever it is. Then we ought to depend on you guys to tell us how to get them to the point where they can be ready in 3 or 4 or 6 months, whatever it is.

General SCHWARZKOPF. I go back to my basic premise. The only basis or point on which it should be examined is what is in the national interest for the defense of the Nation.

Mr. McCRERY. Thank you.

Mr. McCURDY. [Presiding.]

The time of the gentleman has expired.

The gentleman from Georgia.

I would advise the Members that the Chair has gone over to vote and will return. I am going to recognize the gentleman from Georgia.

If other Members want to go and vote and then return so they have an opportunity to question the General, they might do so at this time.

General, if you need to take a break, raise your hand and we will take a quick recess. In the interest of your time, I think it is better to proceed if we can.

General SCHWARZKOPF. My time is your time up to a reasonable level. There is no ceiling. I have another appointment today, but it is later in the afternoon and it is completely flexible.

Mr. McCURDY. I would expect another 25 minutes at the outside.

Mr. RAY. We appreciate your coming today. I represent Fort Benning, GA. I am proud of the fact that you spent a little bit of time there.

I have a two-part question. I will ask it in one question. The Congress is struggling with rearranging our priorities. You have mentioned and paid tribute to logistics in your statement. I appreciate that very much.

Our committee is strongly dedicated to logistics. We vote to fund it and sometimes give the Defense Department more than it needs in that area. I would appreciate it if you would share some of your thoughts with us on any weaknesses that you might have observed in logistics.

Second, the House will soon go to conference with the Senate on fiscal year 1992 Department of Defense Authorization Bill. As you realize, our defense dollars are continuing to decrease. We are going to find it harder and harder to fund some of the important systems and programs that we think we are going to need.

Having just fought a very sensible campaign, what are some of the first priorities that we ought to get ourselves involved in considering our defense budget?

General SCHWARZKOPF. Let me talk a little bit about logistics, first of all, and then go quickly to the other question.

Of all the problems we have in the logistics business, number one, are trucks. Again, we combat types get all enamored with tanks and helicopters and we forget it takes the trucks to back them up. Second, we sometimes tend, in order to save money, to buy trucks off the shelf which work very well on interstate highways or autobahns, but do not work well on bad roads or driving through deserts and that sort of thing.

I am a great believer in the HMMWV type vehicles. You can forget 5,000 gallon tankers that require a road to drive on. HEMTTs and HMMWVs are great on interstates and autobahns too, but they are great on everything else. I would talk about that as an area we need to concentrate on.

We need to not forget the industrial base. The industrial base failed to be able to meet some of our requirements. Probably the most prominent are in the area of the T rations. I have already mentioned that.

In the area of uniforms, we couldn't get the uniforms and boots fast enough. I don't know whether that is due to bureaucracy within the procurement system. I have been led to believe it has something to do with the industrial base. One of the areas of great concern to me was the 120 mm rounds. We never did get what I would consider to be an adequate stockage level in the country because the industrial base could not produce them quick enough.

What I am saying is all of us, when we talk about procuring an armed force, we start with a fighting system, but we should go all the way back through the sustaining systems and also include the industrial base that supports it and look at that as a passenger rather than getting enamored with force structure systems, fighting systems and that sort of thing. That would be my recommendation.

Let me quickly go down my list. I talked about a credible shallow water anti-mine capability and theater tactical intelligence system. I think we need intelligence systems. We have very, very good intelligence systems out there, but I think we need to focus on a real time, all-weather intelligence system that serves the theater commander rather than the national level intelligence agency.

I would reevaluate all aspects of the Ready Reserve fleet. I mentioned the procurement of roll-on rolloff. I am a very strong supporter of procurement of the C-17. I think we could have solved a lot of our problems and gotten in theater a lot quicker and with a lot less call up of the Civil Reserve Air Fleet if we had the C-17.

I mentioned additional HETs and HMMWVs. I believe in them, Heavy Equipment Transporters and high mobility vehicles. The Army field feeding requirements, I think, need to be fixed. Land mine countermeasures, I think, is important. The battlefield identification friend and foe problem, I mentioned that earlier.

I think, and this is a very important point that nobody has focused on, there is a body of law out there that affects DOD operations which needs to be amended in time of crisis. The best exam-

ple I can give you was the minor military construction O&M ceiling of \$200,000 placed upon us even when we went into the transition to war phase.

We had innumerable projects we needed to go forth with to build over there in order to transition to war, and I couldn't build any of them because I was limited to the \$200,000 O&M ceiling. As it was, we did build them, but we were able to build them with some of the funds given to us by the Japanese, Germans and Saudis.

Without those, we would have been hurting. So there is a body of law out there that I think needs to be examined, which is very applicable for peacetime but is not applicable when you are in that transition to war period. I think that is a group of laws that we need to look at and perhaps do some amending. That is sort of my immediate list that comes to mind right now.

Mr. RAY. I appreciate you sharing that with us. You might want to put an additional part of that list in the record because I think that is very important.

[The following information was received for the record:]

LOGISTICS

Mr. Ray: Throughout my tenure in Congress, I have worked hard to ensure that funding for logistics remains strong. It's not a glamorous cause, but one that I have made a priority among the issues I have focused on. In reading your prepared statement I was pleased to see that you noted the important contribution logistics made to the success of Operations Desert Shield and Desert Storm.

As the defense budget decreases, the Congress is struggling with rearranging our priorities as we craft a responsible defense budget that reflects a new world order. Logistics are the bread and butter of a military campaign. Failure to adequately fund logistics needs can severely undermine any military campaign. I would appreciate it if you would share some of your thoughts with us on the importance of logistics and weaknesses which you may have observed as we analyze Operations DESERT SHIELD and DESERT STORM.

General Schwarzkopf: Logistics was critical to the success of this operation. I can't give enough credit to the logisticians, who were able to pull this off - we could not have done the Job without their superb performance. We moved about 9 million measurement tons of equipment and sustaining supplies 7 000 miles and, once in port, pushed these assets over two rudimentary road systems to forward areas where we could use them. This achievement helped sustain high operational readiness rates essential to the successful outcome of Operation DESERT STORM.

My first concern was trucks. The cross-country mobility and the line-haul capability we needed to accomplish the mission was simply not available in the United States military. In order to save money we sometimes buy trucks off the shelf that are very good on the interstate highways or autobahns, but are not so good on bad roads and driving through the desert. I am a great believer in Heavy Equipment Transports (HETS) and high mobility vehicles that include the Heavy Expanded Mobile Tactical Truck (HEMTT) and the Highly Mobile Multi-Wheeled Vehicle (HMMWV). This is an area we need to concentrate on in the future.

The capability of the industrial base was also a great concern. There were some areas that the industrial base could not respond to provide adequate supplies. Most prominent among these were T-rations, uniforms, boots and some munitions to include Patriot missiles. Industry reacted, but the response time was so elongated in some cases that supplies did not arrive in theater until after the fact.

I emphasize that we must insure the industrial base, along with the resources, necessary to sustain our people and equipment is cultivated as we shape our future force structure. In addition, pre-positioning and POMCUS, programs that put equipment in the Area of Operation, must also continue to receive increased emphasis.

Finally, I would reevaluate all aspects of the Ready Reserve Fleet and procure additional roll-on, roll-off ships. I continue to support the C-17 which could have gotten us into theater more quickly and significantly reduced our reliance on CRAF.

ROUNDOUT BRIGADES

Mr. Ray: The notion of the roundout brigade has come under fire recently. In the future, should we continue to keep the roundout brigade a part of our total force concept? What future role do you see for the roundout brigade as we draw down our forces? Is it a case where the concept is good in theory but not in application?

General Schwarzkopf: In the future, roundout brigades will continue to provide a key and integral part of the total force concept. When utilized as envisioned and intended, they provide a valuable resource as follow-on and reinforcing units in a conflict. The roundout concept was not designed to support a DESERT SHIELD/STORM type crisis response. The length of time a Reserve combat unit requires to mobilize, train, and deploy in theater does not support the short, rapid deployment time required in a crisis. As we draw down the force, we should evaluate the roundout program of the Reserve Component with regards to their ability to meet the requirements of regional contingencies vice general war. It may be necessary to transfer some Reserve functions to the Active component and to make some Reserve units ready and equipped for immediate deployment. The roundout program may require some adjustment and restructuring but it remains an important and viable part of the Army Total Force Concept.

TREATMENT OF GUARD AND RESERVES

Mr. Ray: I have received many letters from Georgia Guardsmen and Reservists who have commented on the unequal treatment they received versus that of their active duty counterparts while serving in the Gulf. The stories I have heard are quite compelling. Some Guard and Reserve units indicate they were passed over for needed supplies because the supplies were being held for active duty units. What are your experiences in this regard, and what are your suggestions as to how we can avoid this situation in the future?

General Schwarzkopf: I am not aware of any instances of supplies held back from Guard and Reserve units with the intent that they be issued to elements of the Active component. The policy during Operations DESERT SHIELD and DESERT STORM was that the unit mission determined its priority for receiving supplies. The fact that a unit was active or reserve had no bearing whatsoever on when it received its supplies. I assure you, if there had been favoritism based upon active or reserve status, I would personally have corrected that situation immediately.

PRIORITIES

Mr. Ray: The House will soon go to conference with the Senate on the Fiscal Year 1992 Department of Defense Authorization Bill. As our defense dollars continue to decrease, we will find it harder and harder to fund important systems and programs. In short, we will have to do a lot more with a lot less. You've just commanded a highly successful military campaign, and you have a sense of where we need to focus our limited resources. Could you give us some advice--share with us some of your thoughts on what our priorities should be?

General Schwarzkopf: A detailed analysis of the lessons learned from Operations Desert Shield/Desert Storm is currently ongoing and will be provided through OSD. At the same time we are beginning to develop our FY94-99 Integrated Priority List (IPL) which will identify my most critical warfighting needs. However, an initial analysis has identified some clear deficiencies that require our attention and support. Let me summarize those deficiencies for the record. I talked about a credible shallow water anti-mine capability which will allow for close Naval Gunfire Support (NGFS). At the same time we need to procure additional land-mine countermeasure equipment to provide organic capability to armor, infantry and engineer units. I think we need tactical intelligence systems with real-time, all-weather capability that will serve the theater commander. I would reevaluate all aspects of the Ready Reserve Fleet. We need to procure more strategic sealift, preferably roll-on/roll-off ships rather than bulk cargo ships. I am a strong supporter of the C17. I have become a great believer in trucks, HETs, HEMTTs, and HMMWVs. We didn't have enough trucks to move our petroleum and supplies. We need to procure additional HETs to move heavy equipment and tanks to the tactical assembly area. At the same time we need to procure additional HEMTTs and HMMWVs which provide great mobility and are critical for rapid repositioning and logistics support of armored forces. We need to reevaluate the Army's field feeding program with an eye towards weaning ourselves from total reliance on MREs and T rations. Finally, we need to fund R&D and procurement for Battlefield Identification Friend or Foe (BIFF) to preclude fratricide--our technology in precise munitions and the ability to attack during day or night in all types of weather has outstripped our ability to identify friendly forces, primarily in air-to-ground operations, but also in ground-to-ground operations.

Mr. RAY. I have to leave. My time is up. I would mention spare parts. Did you have a shortage of spare parts?

General SCHWARZKOPF. By and large the spare parts problem was nonexistent. It was very good.

Mr. RAY. Thank you so much.

The CHAIRMAN. Dave McCurdy.

Mr. McCURDY. Thank you, Mr. Chairman.

General, I join with all my colleagues in congratulations to you again. I would like to ask you just very quickly to amplify, if you will, as best you can in this setting and knowing the limitations of classification here, if you would amplify your view as to the quality, quantity, objectivity and timeliness of the intelligence that you received.

You indicated the need to have intelligence assets dedicated to the commander in the theater. Would you care to differentiate between tactical intelligence, the quality you had there, but also the broader national intelligence as far as understanding your opponent and whether or not that was furnished in a fashion that cuts through the data and actually provided the information that was useful to you as the commander.

General SCHWARZKOPF. Yes, sir. Let me just start by saying that by and large the intelligence community did a terrific job. We were able to, and my headquarters predicted the Iraqi invasion of Kuwait. We were surprised at the extent of it.

But we had enough information as to the troop dispositions that we were quite sure an invasion or military operation or military plan was existent. We continued to have a great deal of information across the board on many, many different things. But what we were lacking was a real time ability of the theater commander to get the type of intelligence that needed to be made, that needed to be available to make the decisions that were going to occur within the next 24 hours.

Let me give you a very good example that my Air Force Commander pointed out to me. Chuck Horner said, we were sending aircraft out—this is when we were trying to destroy the Republican Guard, we were sending aircraft out against a target array and after a couple of weeks of doing this, the Air Force would go on against that target array, and it wouldn't be there.

Chuck Horner, when discussing this with him, Chuck Horner said, in every war I ever fought until now, the pilot generally sat there with an aerial photo in his lap and that aerial photo was less than 24 hours old. When he was maneuvering, he could look down on the ground. He had a pretty good idea of what was on the ground. That was available to him and he was able to use that in attacking his target.

We didn't have that. We didn't have that available. You get into this business of BDA. We were going back because of certain BDA assessments we were making, but we weren't getting them validated.

People were saying you are wrong. You have not done that much BDA. We were rehit targets there was no need to rehit. Whereas, as a theater commander, if I had the ability to focus an all-weather national theater tactical system that was at my disposal, I

could say, "Good, look at this and get instant feedback." It would have helped me a great deal to make decisions.

Don't get me wrong. We did a lot of workarounds. Once we got JSTARS over there and some of these others, we did have more and more capability to do that. But it is not one institutionalized within the system. I think the intelligence community is aware of that and I think it is something they are going to be looking at.

Mr. McCURDY. Thank you, General.

As Chairman of the intelligence committee I can assure you we have already looked at that, and I concur totally that there needs to be that capability in theater. We support that. I think the Congress as a whole will continue to support that. I probably can't say anymore in this session.

On a personal note, I wanted to again thank you for your efforts, but also put a plug in for General Horner and the entire CENTAF Staff I had an opportunity to watch up close, to be a fly on a wall at a number of staff meetings in CENTAF and Riyadh as a reservist. It is encouraging for all of us to see the quality of the staff from top to bottom and the professionalism.

It is very easy to get caught up in the infectious confidence exhibited there. It was in every area whether it was logistics or the JAG Office. I don't care where it was, it was professional. They all deserve the highest of compliments as well. Thank you.

General SCHWARZKOPF. I would just like to add that same competence you saw in the Air Force headquarters was there in the Army headquarters, the Navy headquarters, the Marine headquarters also. It was across the board.

The CHAIRMAN. Mr. Darden.

Mr. DARDEN. Thank you very much, Mr. Chairman.

In light of the fact that General Schwarzkopf has to go, I will try to abbreviate my comments as much as possible.

First of all, General, I want to thank you, like Mr. McCurdy and so many other Members of the committee have, for your being so helpful to us when we went to the theater.

I think that so many of the Members of the committee supported the resolution to authorize the President to use force because of your very persuasive and very competent manner and the way you handled the groups as they came over.

So I will always be very appreciative of that and to have had an opportunity to see, in December of last year right before the encounter began, the very high morale, the very immense capability that we have.

The second thing I want to mention to you, you were gone during the time this happened, but I want to inform you that the citizens of Kennesaw, GA, and their mayor, Mayor J.O. Stevenson named an avenue after you in Kennesaw in northwest Georgia. The initial sign spelled your name wrong, but that has been straightened out.

I want you to realize that you have been honored.

General SCHWARZKOPF. That is the story of my life.

Mr. DARDEN. The next thing I wanted to mention to you very briefly is you have, I think, very persuasively made the case for air superiority. We are making some very difficult decisions in Congress this year and in future years about the necessity of continu-

ing to improve our capability with the Advanced Tactical Fighter, now the YF-22.

I hope that this Congress does heed your advice, that this is a continuing type of problem and not just one that you achieve and you stay there; that it is a very, very fluid type of concept and something we have got to maintain.

The final subject I would like to mention is in the area of tactical airlift. You have talked about the C-17. One day when you and Mr. McCurdy and I are all in the grave, we might have a C-17. In the meantime, we have, I think we all agree, for the necessity of tactical airlift, and could you comment on how well the tactical airlift mission was done, how it was performed in the Gulf?

General SCHWARZKOPF. It was a vital part of the Gulf. Again, when I go back to the transportation network we had, we only had two roads going north, not a lot going laterally, one road that went in the wrong direction. A great deal of the intertheatre movement of the spare parts we are talking about, the logistical supplies and this sort of thing was done by the tactical air lifters.

They were workhorses. They did a superb job on a continuous 24-hour a day basis. They moved the things that those units needed to perform out there. Both the Active and Guard units performed fabulously.

All you have to do is go to any one of them and they will tell you all about it. It was a terrific performance.

Mr. DARDEN. For the most part, a lot of these are Reserve components and Guard components. This committee has always supported the Reserve and Guard component of airlift. We were glad to see it play such a vital role this time.

Thank you again.

The CHAIRMAN. Mr. Browder.

Mr. BROWDER. Thank you, Mr. Chairman.

General, because the time is running out, I want to give somebody else a chance to follow my one important question. I will say ditto to the compliments and on your patience, your conduct of the war and your patience.

I want to talk to you about chemical defense capability and ask you one important question about that. I don't need to dwell on the threat. All of us know about the increasing threat. You said on the first page of your statement, "Most importantly, the training was realistic."

When you and I talked over there, I asked you about a readiness hearing that we had coming up about chemical defense capabilities. I asked you if you had a message for us. You said something that stuck with me. You said, don't stop where we are now.

I don't want to put you on the spot needlessly, but we all, I think, have to be put on the spot about this because there are some disturbing developments that I find very disturbing.

First, our budget for chemical biological defense is going down. It is only 75 percent in real dollars of what it was 5 years ago. The request for next year is below this year. The projected request for the year following that is below that year.

There have been some ideas thrown around about moving the chemical school, which according to documents, would degrade our

capabilities and take 5 to 10 years to reattain our status after that degradation.

There is talk about closing and mothballing the chemical decontamination training facility, the only live agent training facility in the free world. We have document after document of uniform military leaders saying that it is essential.

We have got the Lessons Learned Study, a survey of the soldiers that served under you who have demonstrated the value of this live agent training. Again, to put you on the spot, you are not going to be leading our troops back out there next year, but somebody will next year, the year after that or 5 years from now.

Could you give me your response to these developments?

General SCHWARZKOPF. Well, I really don't want to comment. The base closing thing is a very tough issue to address. I would just say that we shouldn't do anything. I feel very strongly that we should not do anything that causes us not to move forward in the area of chemical protection for our forces.

One of these days it is going to happen. We are going to have to fight a chemical war. When that happens, we need to be as ready as we can possibly be and we need to be as well trained. What happens first with chemical weapons is going to determine the outcome of the war.

If our troops are well enough trained and well enough equipped so they can bear the brunt of that attack, get through it and get through the psychological impact of that attack and be able to fight and accomplish their mission, then we are good as gold. From there on, every other attack that hits us is not going to be as bad as the one before.

On the other hand, when they are hit with that first attack which takes overwhelming casualties and they lose their confidence in themselves, lose their confidence in their equipment, then we are going to suffer a severe psychological setback and we could, in fact, lose everything when that happens.

The chemical training is something that is extremely important; the chemical equipment is extremely important. I think we need to be sure that we continue to emphasize the importance of it.

Mr. BROWDER. Thank you, General.

Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Machtley.

Mr. MACHTLEY. Thank you.

General, as everyone has indicated, this country is profoundly grateful for your skills. You were the right man with the right background at the right place at the right time. While there are many individual soldiers who are unnamed who performed credibly, we have you to thank today as their representative.

Frankly, as I think the Navy feels, they have never been led better by a West Point graduate than yourself.

General SCHWARZKOPF. You never feel that way in November, though, I noticed that.

Mr. MACHTLEY. Somehow it changes. I wanted to stay with the theme of the Army and the Navy and the Air Force and ask you—if there is something we should be looking at beyond what you have already discussed to facilitate the interservice coordination for future activities so that we could legislate an easier process for

you in the military? Or is the current Goldwater-Nichols bill performing so well that there is no need?

The second question is unrelated to the first. We have seen the remarkable skill of our military, some of its strategic planning, some of it a surprise. I am afraid our viewers who have been watching this live on TV may get the impression that the Soviet equipment was totally worthless.

I wonder if you might discuss the Soviet equipment to dispel any of those rumors that it was worthless equipment?

General SCHWARZKOPF. Let me start with the equipment and then go back to your first question.

The Soviet equipment did not perform well against our equipment. We also have to remember that a lot of that was second generation and some was third generation and some was fourth generation Soviet equipment.

A lot of it was not the best they have in the Soviet inventory. The first people to tell you that will be the Soviets. I don't think we should back a direct one-on-one transference and say, as went the Soviet equipment in the hands of the Iraqis, so goes the equipment in the hands of the Soviet Union.

I don't think that is a correct analysis to make. Although I will say that, technologically, there was nothing on the battlefield that could stand up to anything we had.

I am sure you heard the testimony of the tank people before the war saying the T-72 was as good as the M-1A1. After the war there is no doubt in anybody's mind that there is no comparison between the two and that sort of thing.

However, I don't think we should discount the Soviet equipment in its entirety based upon the Iraqi War and the way the Iraqis used it.

Back to your first question. I did tell you there was no rivalry between the services that affected the war effort, at least at my level or in any other level in the theatre that I was aware of. The cooperation among the services was absolutely superb. There was complete cooperation all the way along.

I read an article the other day that talked about the rivalry vis-a-vis the Tomahawk missile and how it was used. That is poppycock. That did not happen.

The way the Tomahawk was used was in accordance with the way the Navy and Air Force wanted to use it. They were in complete agreement on its use and how it was integrated into the overall plan.

Part of that was because I had superb commanders who had worked with me as my component commanders in Central Command. As a result of Goldwater-Nichols they worked with me right up until the day the war began.

There are doctrinal differences between the services, and it would be useful if they could be ironed out. I think it is up to the services to do that. I don't think these doctrinal differences can be legislated away.

The important thing was that we agreed when the war started, that we would do whatever we needed to do. Then we would argue about the doctrinal differences after the war was over. That is

what we did in areas where there were doctrinal conflicts. There was no problem with that at all.

The only area I think we need to be very sensitive to is the continuing area of interoperability among the services. We discovered one area where interoperability was not there. I think as a result of this war, and very much as a result of the way we operated in the past, we serve as a team, we work as a team.

Every service chief called me up numerous times and said what can we do for you? Whatever you need, you have got it. I think we have come out of this understanding this is the right way to fight a war. It is the way to win a war.

I think we are in great shape as far as jointness is concerned.

Mr. MACHTLEY. Thank you very much.

The CHAIRMAN. Mr. Edwards.

Mr. EDWARDS. General, as someone who represents 25,000 troops from Fort Hood deployed to the Persian Gulf, I want to express my thanks on behalf of them, their families, their spouses and children, for not only helping us win this war, but saving lives. What a thrill it is to see those men and women come back home and be reunited with their loved ones.

I know you feel there is no way to put that sense into words. I never felt more deeply appreciative to the armed services for the sacrifices they made than when I saw them rejoining their families.

We talk about the lessons of the war. I would imagine dictators and Third World country thugs are also trying to learn the lessons of this war. I would imagine one of their lessons would be if you are going to go into an aggressive mode, potentially bringing in the United States, you better move quickly, fast and move as far as you can as quickly as you can.

My question in hindsight would be: If Saddam Hussein had decided to move immediately from Kuwait into the oil fields of Saudi Arabia and used that potential blackmail threat against the communities of this world, could we have stopped him initially? If so, how?

In addition to any other comment you have made, are there any other preparations we need to be able to make to respond immediately—the 24 hour, the 48 hour, the 36 hour response that might prevent us from having to send half a million troops across the world?

General SCHWARZKOPF. I do think we could have stopped him. I think we would have to rely, initially on tactical fighter squadrons, to interdict his supply lines as he came across. It would not have been easy.

I think we would have found ourselves in an enclave type of defense, the very toughest thing. We would have had a lot bigger problem to eject him. Of course, we wouldn't have had the freedom to bring the forces over there the way we did.

General SCHWARZKOPF. But I do think we could have stopped him. I think that probably the biggest lesson that is going to be learned by some of the folks about what happened over there is they are going to take it very seriously and when we say we are going to do something, we do it.

It would have been a much tougher problem. That brings us back to the fundamental of a contingency force based in the United States. When you make that decision, you have to start making those decisions that are necessary to get it back quickly.

We are talking fast sealift, C-17, strategic airlift, prepositioning, POMCUS and those things that put the equipment over there so you can get the troops in quickly. There is no free lunch. You can't pull them back and not do something about these other things that will put them there quickly and expect to get them back over there quickly.

Mr. EDWARDS. Thank you.

The CHAIRMAN. Bob Dornan.

Mr. DORNAN. General, I really appreciate your giving us extra time, because obviously, throwing all false pride to the wind here, it is an honor for us to be able to ask you questions in private or in public.

I was on the Mavroules CODEL with Mr. Hertel and others during the last week in November, on the eve of the U.N. vote, and after you gave us those 2 hours of Q&A, the U.N. voted to support violent action, if necessary.

I just wanted to ask you three questions, and as the style here is putting a burden on you to remember each question, if we use our green light to ask the questions, you are under no restraints to respond.

I love the written works of a British historian, John Keegan. He has already written some brilliant analysis without benefit of classified material. He keeps calling the 100-hour land war Desert Saber. Was such a title applied to that?

General SCHWARZKOPF. No, sir. Actually, we had three titles, Desert Shield, which was the defensive phase; Desert Storm, which kicked off on 17 January, and that went to conclusion, and now we use Operation Desert Sortie. It keeps it all ODS and makes it pretty simple.

Mr. DORNAN. What is "sortie"?

General SCHWARZKOPF. The pulling of the forces out and bringing them back home.

Mr. DORNAN. Here are my three questions. I am asking this for two sons who are staying with me now, both in their early thirties. We watched the thing in New York, starting with the St. John the Divine services the night before.

Could you tell me how you felt when those demonstrators were screaming murder in your face, given that you have a military now of lowest casualties of anybody ever ordered by his President into a situation of violence?

My colleague, Mr. Kasich, was kidding me that I am the only Congressman or Senator who managed to observe on a combat mission, a refueling mission on the first day of the land war on the Iraqi-Turkey border. He said it is going in his book that I was for sanctions. I was, up until January 9, when our fine Secretary of State went to Geneva and faced off Tariq Aziz; next to him was the cutthroat killer, half-brother Barzon Takrit eyeballing everybody with the evil eye.

You said, I am the last one who wants to go to war. I held out until that last effort. Did you feel that there was a cleverness to

Saddam Hussein? We were all briefed by the CIA, that he was a desert fox, a crafty person, a survivor, a man who played brinksmanship to the end.

Did you feel that he would push it right to the edge and then diplomatically try to avoid the air war. We thought he would avoid the land war.

The women performed brilliantly in the Gulf.

Would you go on record for us on whether women should be in fighter cockpits of the A-10s, and should they be rappelling out of helicopters at night 2 or 3 days before the land war started with special forces?

General SCHWARZKOPF. On the protesters, I think it is unfortunate that people like that don't understand that it was for their very right to do that that all of us are in the Armed Forces. I respect their right.

It is unfortunate that they didn't choose to respect the rights of the other 2,000 people in the cathedral that day conducting a solemn and beautiful memorial service to all the dead of the Desert Storm campaign.

I came back here, and one of my first functions after I got back was the White House correspondents' dinner, and I was standing in the window of the hotel and looked out and there were a bunch of demonstrators beating a drum, and I said to my wife, "Come see this, it is great to be home."

I assure you, we would not see that anyplace else in the world. If people in Iraq had pulled the stunt they pulled in St. John's, they would have been dragged into the streets and killed. It is unfortunate that they don't understand that. I don't object to their right to do that, I just wish they had picked a different venue to do it than the one they did.

They obviously don't know very much about Iraq. The one fellow was saying "I support the brothers and sisters of Iraq, and the Iraqi—" and from some of the comments he made, he didn't know much about what he was talking about.

But again, that is very much a part of being an American, very much about being in America, and that is very much, I think, about being in New York City and being able to protest outside St. John the Divine. I say that in a complimentary fashion.

As far as Saddam Hussein's brinksmanship, I think that Saddam Hussein felt until the very end that we were going to launch our attack right into the teeth of his forces, go into his fire trenches, take overwhelming casualties, and as a result of taking those terrible casualties, the will of the American people would break and they would not support us, and we would quit and go home.

I can think of no other reason why he would have continued to occupy Kuwait and stay there during the entire conduct of the air war. I don't think he got very good information from the military commanders as to the amount of damage we were inflicting on his forces at the front.

During the Saf war negotiations, when the count of EBWs came out, and they realized how much Iraqi territory we were actually occupying at the time, the generals there from Baghdad were stunned when they got the revelations of how badly they had been defeated.

I feel their overall strategy was one of, inflict mass casualties on us, the same tactic they used against the attacking Iranians, and it prevailed for them there. They forgot that we had read all the lessons from the Iran-Iraq war.

On women in combat, my position on women in combat has never changed. Unfortunately, the women in combat issue is being argued in the arena of women's rights. I am a very strong supporter of women's rights, having two daughters in college right now, and I am very much a supporter of women's rights.

But the question of women in combat should be argued in the arena of national defense. The question is, "What is the best place for women to serve within the Armed Forces that will contribute to the defense of our Nation and at the same time allow them an equal opportunity to succeed in the Armed Forces, the same opportunity that every man has?"

The first consideration has to be one of what is best for the defense of the Nation. I don't believe that it is in the best interest of the Nation if 50 percent of every infantry battalion is female, if we try to put women in infantry battalions that will be involved in trench warfare and hand-to-hand combat with the enemy.

No other nation in the world feels that way, either. I am saying that there has to be, in the interest of national defense, a line drawn someplace. Now, the debate is where should the line be drawn?

Having seen women perform in cockpits or helicopters, I think women could perform magnificently in any Army cockpit and have no question they would excel. They took casualties, became prisoners and were killed in action, and people predicted we would all fall apart when that happened, and it didn't happen.

I think we should reevaluate where the line should be drawn as far as at what level we have women in our combat organizations, but the fundamental consideration has to be the defense of the Nation, and we have to make the decision based upon that as a first consideration.

Mr. DORNAN. Should Vietnam veterans be invited to march in the remaining parades from July 4 to November 11th? They were in San Francisco and New York. You are a veteran. They weren't invited in the Washington, DC parade, and I was highly disappointed.

Thank you, sir.

The CHAIRMAN. Herb.

Mr. BATEMAN. I guess it was December when I first met you, General, and had one of the most exhilarating days of my life when we left you and went out into the field with those tremendous troops that you commanded. It was an extraordinary experience to be there in some of the forward areas with our people and the incredible equipment, the supplies, and how it had all come together was just an absolutely overwhelming experience and one that I think attests to the incredible brilliance that we have in our Armed Services.

I waited longer, more really to say that than to ask questions, because about everything that I have thought of has been asked. There is an area of concern, and I guess it relates in large measure to my being on the Military Personnel and Compensation Commit-

tee, and that is a concern over the way we are going about the drawing down of our military capabilities in light of the changes in the geopolitical equation.

I guess none of us can argue with the fact that those changes have occurred, and they have implications for the size and nature of our military capabilities.

You emphasized, at the outset today, the quality of our military personnel as you very appropriately should, and that it is a volunteer force. I have some concerns that we might have trouble in the future putting together or keeping together an all-volunteer force of that quality if we don't treat our people right.

The concern that I have most strongly right now is, if we draw down our end strength so rapidly that people who served even with great distinction in Operations Desert Shield and Desert Storm and who had counted on a full career in the American military are to be turned out of the American military, their career ambitions unfulfilled, notwithstanding distinguished service and eminently capable of continuing to serve.

Do you have any concerns about whether or not we are drawing down too fast, and I have to add a caveat, I know this may be difficult for you to answer in view of the fact of what our committee has done versus what the Appropriations Committee has done, what the administration has requested relative to Reserve and National Guard versus Active duty, and what in the world the other body across the Capitol may do.

But any observations or insights that you could share with us on the sensitivity of how we deal with our personnel and being able to keep that all-volunteer force of a quality that we presently enjoy?

General SCHWARZKOPF. Well, I think it is again blinding them to the reason why the forces are being drawn down. It is for fiscal reasons and the fact that the money is not there to support that level of force. In my service career, I have seen three RIFs and it is a gut-wrenching experience, not only for those that are RIFed, but for those who remain in the force, because they worry if they are next.

The services are very worried about that. As a young officer, I came into the military service with the expectation that I would have a 30-year career, and that there was a certain degree of stability within the service, and once you made a commitment beyond a certain point, you were almost tenured.

It is a much higher quality of force today than we had when I came in, or when they went through any of the other RIFs. It is a tough, tough problem, and I think it is inevitable that we will pay a price for the RIF, and we will lose some very, very fine young men who otherwise would stick with us. But, because they are so fine, they recognize that they are still young enough to get out and find an alternate career someplace else. Because they are very capable they can get out early in their careers rather than run the risk of waiting and being booted out.

There is no free ride, and because of fiscal constraints, the size of the Armed Forces is going to draw down, that is one of the prices that is going to have to be paid.

Mr. BATEMAN. Thank you.

The CHAIRMAN. Martin Lancaster.

Mr. LANCASTER. Thank you, Mr. Chairman.

Thank you for your testimony, General, and for the magnificent job you and your forces did in Desert Shield and Desert Storm. At the time the President submitted his budget to us, we had not yet begun ground operations in Saudi Arabia, and as a result, as we put our authorization together, we thought that perhaps there was an overemphasis on strategic programs, and we modified priorities and put a greater emphasis on conventional programs.

We have now been criticized that we went overboard in the other direction, and have put too much emphasis on conventional. What is the appropriate mix between strategic and conventional, and how do you achieve that proper balance?

Another question, this touches on an issue that Mrs. Byron mentioned to you, and that is the problems of redeployment of Guard and Reserve forces who are so heavy into support functions that their presence is needed in theater before there is a big combat buildup. Sometimes they continue to be needed after the combat forces withdraw, but that leads to the keeping of Reserve and Guard forces in theater for a significant time after the battle is over. For the citizen soldiers who want to come home as soon as the last shot is fired, this can cause some morale problems with them and with their families.

Have we got the right mix of support and combat functions between Reserve and Active forces, do we need to look at that again, and if it is the right mix, is there something we can do to expedite the return of soldiers once the fighting is over?

Last, you have also mentioned the interoperability problem. It appears to me that the interoperability problems of Grenada have been solved except for one problem with intelligence sharing.

Why was that not fixed, and do we have assurances now that it is going to be so that the next time we have a joint operation, that we don't experience that same problem?

General SCHWARZKOPF. Let me go in inverse order. The intelligence problems did not surface in Grenada. If they had, I am sure they would have been fixed. The intelligence challenge in Grenada, as you can imagine, was very small, almost insignificant. The war didn't last long enough for us to uncover that problem. There was no air war, which is where we had the problem.

So it didn't surface in Grenada and we didn't know it was there. Now we know it is there, it will be addressed and straightened out.

On Guard and Reserve mix, there was a conscious decision made by the Army quite a few years ago which placed 80 percent of the combat service support forces into the Guard and the Reserve. That is the reason why you end up with the situation that you have today.

The missions that are left to be done over there are stevedoring, loading ships, cleaning up vehicles, mothballing them, shipping them back home, maintaining them and that sort of thing. That is very much a combat service support mission, and as a result, de facto when the decision was made to put 80 percent of the combat support mission in the Guard and Reserve. What you were saying when the war is over, these are the people who will be left behind.

We have 61,500, effective today, people over there. Of that number, 15,500 are Guard and Reserve, so the forces left there are

not exclusively Guard and Reserve. Those 15,000 people are there because they are in the combat service support arenas.

The question comes up, why don't you take some of them and replace them with Active units. I am told there are not Active units to replace them with. Others will tell you we are not performing our basic role anyhow. We are just a body washing a truck. Anybody can wash that truck, therefore we have a lot of active bodies that can be sent over there.

I would defer to the Army to answer the question. I think it has to do with transportation and a lot of other things. I just leave that to the Army. That is why the situation exists.

Now, the question comes up, if you don't want that to happen, what do you have to do? You have to put more of the Active force into combat service support roles, but if you are talking about drawing down the size of the Active forces, now you have a dilemma.

That is one of the things in the continuing debate about the total force policy and the structure of Guard and Reserve and Active forces that has to be addressed. That is a question that will be looked at in the future.

How much goes into strategic or conventional is not my decision to make. Again, though, my personal opinion is that it is going to be based upon arrival at a consensus as to what kind of wars you are going to fight in the future, and then you go ahead and structure your force for that with the clear warning in mind that we have been very poor at predicting future wars that we would be fighting, and therefore you don't want to put all your eggs in one basket.

The CHAIRMAN. Mr. Spence.

Mr. SPENCE. General, you have been wine and dine and complimented, and you deserve all of it. I want to add my note of appreciation to you for your leadership for helping to bring this country together in a cause like we haven't seen since World War II.

At the risk of breaking tradition and not making a speech before asking questions, you have been following the recent actions of this committee and of the Congress relative to the military budget and the proposed cutbacks over the next 4 or 5 years.

If we had the type of military in the Persian Gulf that we are going to have when we finish tearing down the military as proposed could you have done the job that you did in that conflict?

General SCHWARZKOPF. Yes. We have to go back to what I said before, about 15 assumptions that you have to talk about. If we still have an all-volunteer force 5 years from now, still have the same personnel in place that bring the quality people in, if we continue to maintain our technological edge, you put all of those things together, and a few more, and then when you look at the number of divisions, the number of aircraft, the number of ships that we are talking about having in the Armed Forces 5 years from now, yes, we could perform Desert Storm all over again.

By the way, we cannot have another conflict someplace else and do them both. That is the other very big if.

Mr. SPENCE. If we had a smarter enemy, a navy interdicting our supply lines, if we didn't have more sealift than we have now, all those things, it would be a different situation?

General SCHWARZKOPF. In my 35 years in the Armed Forces, I have been through every variation of war you can imagine. We have had the 2.5-war strategy, the 1.5-war strategy, the three-fourths war strategy, the two-war strategy, and I am not sure that we could have done any of them at one point or another given the size of the Armed Forces at the various times we were talking.

All assumptions are very important, but given the set of assumptions that I just gave you, we could exercise a Desert Storm 5 years from now given the plan that is on the books for the reduction of the size of the Armed Forces.

Mr. SPENCE. Thank you.

The CHAIRMAN. Gene Taylor.

Mr. TAYLOR. General Schwarzkopf, it appears this hearing has lasted almost as long as the war. I want to thank you for sticking around and giving me the opportunity to ask a couple of questions. I, like everyone else, want to compliment you on behalf of all the mothers and fathers and sisters and brothers and parents for keeping the casualties as low as we did.

That is our greatest accomplishment of all, that we were able to. We met with you prior to your departure from Saudi Arabia, and the next day met with Crown Prince Sabah in Kuwait. He mentioned he would welcome a U.S. presence. My question to you as a military man, not as a politician or policymaker, do you feel like a continued U.S. presence in Kuwait could prevent another war?

Would it needlessly risk our personnel? Would it strap your resources at a time when we know the budget is more or less frozen, so when you throw in inflation, you are going backwards a little bit?

As a military person responsible for that part of the world, in protecting our interests, how do you feel about that offer and whether or not we ought to accept it?

General SCHWARZKOPF. That is a very tough question. Again, there is no easy answer. Kuwait is awfully close to the potential enemy, as was obviously demonstrated. The enemy came across the border very quickly and overran all of Kuwait in all of 3 days.

Therefore, your first reaction is we don't want forces that close. But then I think there is no question about the fact that had U.S. forces been permanently stationed in Kuwait, the enemy would not have attacked. That is the good news.

The bad news is there are a lot of places in the world where enemies could have attacked. Do we want to put U.S. forces in all those countries, all of those hot spots? I think this is all part of the debate we are going through right now.

Mr. TAYLOR. Is it safe to say your mixed response is a no?

General SCHWARZKOPF. I think it is safe to say at the present time, we have no intentions of permanently stationing U.S. forces anywhere in the Middle East.

Mr. TAYLOR. Is that your recommendation as well?

General SCHWARZKOPF. Yes.

Mr. TAYLOR. My second question is, one of the Reserve units. I want to thank you and General Pagonis for expediting the return, giving the families a definite date they can expect, or at least a definite month they can expect their loved ones home.

Something we are encountering, though, is in at least one instance a fairly high-ranking officer in theater has given a unit from Mississippi a date of return from overseas that is several months earlier than the date that General Pagonis issued just a couple of months ago.

Number one, is that possible? Can it be true? Number two, if it is not true, I hope that some progress can be made. The families have been on an emotional roller-coaster where they have had two or three of what they thought were firm dates that their loved ones would be home only not to come true.

I think they would be better off if there was a date they could count on.

General SCHWARZKOPF. What General Pagonis did when he gave the original dates out is he told the unit, this is the absolute latest date we will deploy. It is all geared on the speed with which we are getting the stuff out of the country. The faster we can get it out of the country and back home, the faster we will get the troops home.

Obviously, we are trying to do it as fast as possible. It is entirely conceivable that particular unit has been moved up in its arrival date back home because we are getting stuff back quickly. If you just give me the unit, I can find out very quickly what the story is, and we will make sure we get the word to them and the families.

Mr. TAYLOR. 1355th, S&S Unit from Mississippi.

General SCHWARZKOPF. I assume my highly-efficient staff is frantically writing that down behind my back.

Mr. TAYLOR. He already knew it.

Thank you.

Mrs. BYRON. Mr. Chairman, could I ask the indulgence of the General for one final question. This is a basic issue which we have talked about all day today, and that is the quality of the people we have in the service?

This country woke up every morning all fall and all spring, turned on their televisions, and saw the fine troops that you had in the desert day-after-day, clean-cut, articulate, bright eyed, say good morning to America and their families and their loved ones. We as a Nation in many major metropolitan cities go to bed each night with the evening news completely filled with the number of drug-involved deaths or crimes each night, the number of Medstar helicopters that were on their way in on a crime of violence.

What is it that those young people that you led half a world away had gotten out of their education or their environment that brought them to the capability of meeting the needs of this Nation when they were called on?

What is it that those young people we saw on the evening news missed in their growing up?

It is a key element that I think we as a Nation need to address and understand if we will be able to turn around many of the things that are happening within our innercities and our single families, young people's lives.

You were able to take those same young people, inspire them, lead them and get the very best out of them.

What is it that we missed with that other segment of the population?

General SCHWARZKOPF. Well, I am going to tell you something that you already know.

In the Armed Forces today 98 to 99 percent of all people in the Armed Forces are high school graduates. We found, interestingly enough, and it has nothing to do with education, it has nothing to do with intellect or anything. It is self-image.

We found that if a person is a graduate, has stuck through high school and graduated from high school, that there is a four times greater chance they will complete their first enlistment, that they will not be kicked out, thrown out, quit, resign, whatever.

A four times better chance of them completing their enlistment than a person who has dropped out of high school. It has very much to do with the fact of good old American "stick-to-itiveness," if you want to call it that.

More important, I think they have an image of themselves as a winner. When you have someone who has a positive self-image, you can continue to build on that image.

They are magnificent men and women. They are real gentlemen and ladies, as was reinforced to me over and over again by people who met them in Saudi Arabia, met them on the airplanes going back. They were able to live in a drug-free and alcohol-free environment.

Yes, they all complained, but it was tongue in cheek and it was laughing and joking. They found out that these things were not necessary for them to survive.

It is a generation that genuinely cares about human beings, cares about each other as people, cares about their country, cares about the world situation and is willing to sacrifice for them.

Again, it is fundamentally the fact that they have a positive self-image of themselves when they come into the Armed Forces. We emphasize to them that they are winners when we take them.

We don't make them into winners. They are winners when they arrive.

I think that that is probably something that we can focus on in this country in solving so many of the other problems that we have out there.

It is a question of the image that these people have of themselves and of where they are going in life that has a great deal to do with how well they succeed in the Armed Forces.

Mrs. BYRON. Thank you.

The CHAIRMAN. General, thanks.

Thank you for a great afternoon.

[Whereupon, at 4:53 p.m., the committee adjourned.]

